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THE WEEKLY MEDICAL REVIEW

AND

JOURNAL OF OBSTETRICS

AND

DISEASES OF WOMEN.

MEDICINE AND SURGERY. VOLUME XII.

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EDITORS:

ROBERT LUEDEKING, M. D., 311 ELM STREET, ST. LOUIS.

F. C. AMEISS, M. D., 2601½ FRANKLIN AVE., ST. LOUIS.

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THE WEEKLY MEDICAL REVIEW.

MEDICINE AND SURGERY.

VOL. XII. No. 1. CHICAGO AND ST. LOUIS, JULY 4, 1885. TERMS: $3.50 A YEAR.

OUR INDEX.—We beg leave to call attention to the complete table of contents of Volume XI of the REVIEW that was issued with the last number. Our subscribers will take notice that only the Medical and Surgical Department is included. The Departmens of Obstetrics and Gynecology is to form an annual volume that runs from beginning to end of the calendar year.

ON THE RELATIVE VALUE OF MEAT PREPARATIONS.—Beeftea and meat-extracts play quite a role in the regimen of our patients and convalescents; and it is of practical value to know just exactly what you are doing for your patient when you order one or the other of the numerous preparations in the market. Dr. A. Stutzer, of Bonn, who in the past years has done much work in food-analysis, reports the results of his examination of Anglo-American Beef-extracts in No. 15 of the Berliner Klinische Wochenschrift. He procured nine preparations from the United States; two of these were made after original German formulas, i. e., Liebig's and Kemmerich's extracts; four were American preparations; three English. The examination was so conducted that the organic substances, the salts and water, were first determined; then in second order the organic material was further analyzed. Thus was ascertained how much of the nitrogen contained in the specimens belonged to easily digestible albumen and peptones, that constitute the nutritious elements, and how much nitrogen was due to the extractives, kreatine, carnine, etc., which together with potash and phosphoric acid constitute the essentially stimulative elements.

Liebig's extract was found to contain kreatine and carnine and phosphate of potash in large amounts; it is therefore essentially a stimulant and has no nutritive value. Kemmerich's extract contains 22 per cent of peptone and albumen, and therefore is not alone a nerve and heart stimulant but also a valuable nutritious substance.

Murdock's Liquid Food (extract of beef, mutton and fruits), a Boston preparation, contains, as the circular states, 13½ per cent soluble albumen. Valentine's Meat-Juice, Richmond, Va., contains the extractives principally and but little albumen and peptone. Johnston's Fluid Beef, a Canadian article, contains quite a percentage of albumen, but is objectionable on account of containing fully 50 per cent of water. Still more water is contained in the Manchester, England, preparation called Benger's Peptonised Beef Jelly, and in Brand's Essence of Beef, London. These contain nearly 90 per cent of water.

The Fluid Meat of Savory and Moore, of London, was found to contain chlorides in abundance. The meat appears to be peptonised by acid and too strong an action seems to have ensued. The peptone is found to have been disintegrated into simple component elements, the nutritive value of which is not equal to the unaltered peptone.

Reed and Carnrick's Beef Peptonoids (New York) is a different preparation from any of the foregoing. It represents a fine, dry powder, made up of beef, gluten and milk, forming a mixture of highly nutritious, vegetable and animal substance. The gluten of wheat is carefully separated from the other organic components. This is shown by the presence of only 1.25 per cent of starch and 0.25 per cent of cellulose in the preparation.

Dr. Stutzer, in order to show the relative value of these articles in their nutritive prop-

erties, has prepared a table setting forth and comparing the amounts of easily digestible albumen and peptone in the several specimens.

Carnrick's Beef Peptonoids are the most nutritious, and 100 parts of them contain as much albumen and peptone as:

Parts		
178	-	Johnston's Fluid Beef,
285	-	Kemmerich's Fleisch Extract.
483	-	Murdock's Liquid Food,
765	-	Brand & Co's Essence of Beef,
764	-	Savory and Moore's Fluid Meat,
898	-	Liebig's Extract,
902	-	Benger's Peptonised Beef Jelly,
966	-	Valentine's Meat Juice.

Besides the nitrogenous substances Carnrick's Peptonoids contain 10.67 per cent of fat and 10.02 per cent soluble, non-nitrogenous substance, i. e., dextrin and sugar.

On arranging the specimens in accordance with their stimulative properties, i. e., according to their percentage of extractive matter (kreatine, carnine, etc.,) we find that Liebig's Extract leads the list. One hundred parts contain an equal amount of these substances as:

Parts		
126	-	Kemmerich's Fleisch Extract,
537	-	Valentine's Meat Juice,
558	-	Johnston's Fluid Beef,
1844	-	Benger's Peptonised Beef Jelly,
4161	-	Murdock's Liquid Food,
5053	-	Brand's Essence of Beef,
7782	-	Carnrick's Beef Peptonoids.

These tables show that a distinction must be made between these preparations,and their choice should be determined by a careful consideration of the exigencies of a case.

The fluid preparations are inferior in both qualities to the semi-fluid and solid extracts. It would be interesting to make a similar investigation of the beeftea, as prepared domestically, in order to learn its exact rank in the above lists.

The above was written some time ago and has been in type for four or five weeks. In the mean time we find in Friedlaender's Fortschritte der Medicin that experimental feeding of animals with Kemmerich's preparation and with a new substance prepared by Kochs of Bonn lead to the conclusion that these peptones alone do not seem to replace albumen, i. e., the formation of flesh does not appear to follow their exclusive exhibition. Animals that got these peptones together with a diet of fat and carbohydrates increased in weight, but probably from an assimilation of fat and water. These experiments are only of a definite value if the quantitative relations of the excreta are correctly determined. At the present then it would seem that all these preparations are valuable as stimulants in first order, as nutrients probably only in conjunction with fat and carbohydrates.

Missouri State Board of Health.—Governor Marmaduke has completed his appointments to the State Board of Health, and has issued a circular to the members calling a meeting for the purpose of organizing at 3 o'clock in the afternoon of July 3, at Jefferson City. The circular states that the appropriation for the support of the Board is exhausted, but that the organization is continued at the request of State and County Medical Associations. The attention of the Board is called to the cattle interests, two members being appointed especially for that purpose. The following are the members of the board as now constituted: Dr. Albert Merrell, St. Louis, eclectic, appointed September 1, 1883, term expires July 2, 1887; Dr. George Homan, St. Louis, allopathist, appointed July 2, 1885, vice Dr. Gregory, resigned, term expires July 2, 1887; Dr. Jefferson D. Griffith, Kansas, City, allopathist, appointed July 2, 1885, vice Dr. Hereford, resigned, term expires July 2, 1887; Dr. G. A. Goben, Kirksville, allopathist, appointed July 2, 1885, term expires July 2, 1892; Dr. George M. Cox, Springfield, homeopathist, appointed July 2, 1885, term expires July 2, 1892; Major William Gentry, farmer and stockman, appointed July 2, 1885, term expires July 2, 1892; Mr. James B. Prather, Maryville, farmer and stockman, ap-

pointed July 2, 1885, term expires July 2 1892.

We have not the pleasure of an aquaintance with the gentlemen named, excepting Dr. George Homan. Drs. Merrell and Cox have served on the Board for some time. Dr. Homan is well known as the former Chief Sanitary Officer of St. Louis and on account of his prominent identification with the American Public Health Association. He is a sanitarian in the full sense, all his thoughts and inclinations being in the direction of the promotion of preventive medicine. He is a valuable addition to the Board and preeminently qualified to fill the responsible and important position of Secretary to the Board. He is our candidate and we hope the Board will recognize his fitness and place him there where his best work can be put forth. Rauch of Illinois and Homan of Missouri would work together well and intelligently.

The Thyroid Gland.—The phy cal puzzle offered by the thyroid gland is becoming more and more intricate and inexplicable. Tizzoni and Albertoni of Bologna, are out in the Centralblatt f. die Med. Wissensch. with a preliminary statement in which they assert that the symptoms resulting as a consequence of total extirpation, i.e. tremor, convulsions, anesthesia, emaciation, elevated temperature of the skin, kerato-conjunctivitis, dyspnea, are due to a very low per cent of oxygen in the arterial blood. The arterial blood resembles in this respect the venous blood in health and may even show a lower percentage. Several days after the operation blood was taken direct from the femoral artery and collected with due precaution. It was found that the volumetric percentage of oxygen in the arterial blood of healtuy dogs was 17.8; in the arterial blood of the operated dogs, it was but 8-11 in 100.

There was also demonstrable a degeneration of peripheral nerves akin to the retrogressive changes observed after nerve stretching, i.e., changes in the medullary sheath, destruction of the axis-cylinder, etc. An examination of the central nervous system had not been had at the date of the publication, June 13, 1885.

The Principal Antipyretic Drugs and the Mode of Recognizing Them in the Urine.—The N. Y. Medical Record quotes the following reactions given by the London Medical Record: "Quinine gives a white precipitate with tannic acid; with solution of iodide of potassium and mercury (Tanret) it gives an abundant yellowish-white precipitate; with solution of iodide of potassium and iodine a brownish-yellow or chestnut-brown. The presence of salicylic acid, carbolic acid, resorcin, and kairin is shown by the addition of solution of the perchloride of iron (no reaction with quinine), which gives rise to a reddish-brown, wine-colored, violet, smoky or bluish color. If, on the addition of sulphuric acid, the color becomes clear red, kairin is present; if the color obtained with the perchloride disappear on the addition of sulphric acid, salicylic acid or resorcin is present. Carbolic acid with nitric acid gives a blood-red brown color and precipitate, with lively effervescence. Resorcin and salicylic acid are unaffected. Caustic potash, added lastly in excess, gives a golden yellow flocculent precipitate with resorcin; with salicylic acid the original violet color partly returns. If the urine be diabetic, to avoid error, it is well to boil it to drive off volatile products, such as acetone, which would falsify the reaction with the perchloride of iron.

Clinical Course and Treatment of Spina Bifida.—A committee of the Clinical Society of London submitted a report on the "Anatomy of Spina Bifida and Its Treatment by the Injection of Iodo-Glycer.ne Solution" at a meeting held May 22, 1885. The British Medical Journal contains an abstract of said report.

In order to determine more clearly than had hitherto been done the pathological conditions included under the term the committee undertook an examination of all the specimens of the deformity contained in the Lon-

don museums, as well as those in Cambridge, Glasgow, etc.

The museum specimens were discussed under the following, or some of the following, headings:—1, position of the tumor; 2, size and configuration of the sac; 3, coverings of the sac; 4, disposition of meninges within the tumor; 5, size and configuration of the deficiency in the neural arches; 6, disposition of the spinal cord and nerves; 7, unusual variations; 8, the process of cure. The result tended to show that the specimens fell under three chief divisions: 1, protrusion of membranes only (spinal meningocele); 2, protrusion of membranes, together with the spinal cord, and its appertaining nerves (meningo-myelocele); and, 3, protrusion of the membranes, together with the spinal cord, the central canal of which was dilated so as to form the sac-cavity, the innermost lining being constituted by the expanded and atrophied substance of the cord (syringo-myelocele). As to the comparative frequency of these three varieties, the committee stated that the second, meningo-myelocele, was by far the most frequent while simple meningocele came next, and syringo-myelocele last.

Careful microscopic examination revealed that the theory which best explained the pathological anatomy of spina bifida, was that which assumed a primary defect of development of the mesoblast from which the structures closing in the vertebral furrow were developed.

Following this portion of the report the committee discusses the Clinical Course and Treatment as follows:

"In order to form a correct estimate of the value of treatment by the injection of Dr. Morton's iodo-glycerine solution, the committee had endeavored to ascertain as far as possible the natural history of the deformity when untreated, and had prepared tables of cases treated in various manners for purposes of comparison. As regarded the natural history of the deformity, the Registrar-General's report for 1882 showed 649 deaths from spina bifida in England and Wales, of which 612 occurred under one year of age. The committee held that, though a certain number of these deaths were due to local causes —rupture of the sac, draining away of the cerebro-spinal fluid, and subsequent septic meningitis—yet in a large proportion of the cases death ensued from the marasmus and general defective nutrition frequently associated with the deformity, and which could not be remedied by any local or other treatment. The tables next dealt with treatment by injection with simple solutions of iodine, and showed a considerable amount of success. Then ligature of the sac was considered, and here again good results seemed to have been obtained. Excision likewise had a considerable proportion of success. The plan of repeated tapping and pressure gave the least successful results of any. The injection of Morton's fluid, according to the committee's tables, showed a percentage of success of between 50 and 60. The high mortality was thought to be, in unsuitable cases, largely due to the treatment having been adopted on account of its simplicity and supposed safety. In spite of the favorable results of ligature and excision of the tumor as shown in the tables, the committee felt themselves compelled to report against these methods of treatment. There was reason to think that the published cases might be misleading, owing to some cases of failures not being recorded, while all the successes, being regarded as surgical triumphs, were almost certian to have been recorded. Moreover, it seemed probable that a careful selection of cases had been made. The committee, therefore, advocated the plan of treatment by injection—and preferably by the injection of Morton's fluid. A series of conclusions brought the report to a close."

We may add that Morton's solution is made by dissolving ten grains of iodine and thirty grains of iodide of potassium in one ounce of glycerine. Half a dram of this solution may be injected, without allowing the fluid contents of the tumor to escape at intervals of a week or ten days.

International Congress and its Committee.—The "new" Committee of the International Congress met last week in Chicago. Our readers shall hear what they did as soon as all the reports are in. The Columbus Medical Journal got off the following on the subject:

"We received the list of appointees some time ago, and failed to find anything to criticise. We thought the names had been selected with great care, to secure men of, as far as possible, national, if not international, reputation. But not so with all. The Committee had made no provision for the eloquent champion of the mothers of Texas; they had ignored the oleates; they had not tested all their appointees by the shibboleth of the Code; they had not given the 'rural deestricts' their numerical ratio of the offices; whole States and Territories were entirely ignored; even Ohio had but fourteen, and of these her metropolis had all but one, while New York, Philadelphia, and Boston were liberally remembered. And so there was a kick. The original kick was kicked, it would appear, in Texas, whence—in the vigorous, but slightly mixed, figure of the Courier-Record—it (the kick) 'rolled into one mighty billow and at New Orleans inundated, swamped, aye, snowed under the whole arrangement.' And so it was decided to increase the size of the Committee, and otherwise so arrange matters that the ranches of Texas, the prairies of Kansas, the mines of Colorado, and the forests and wheat fields of the great Northwest should all be 'represented' among the officers of this Congress. Verily, we trust the original committee, and their rustic accessories, may duly exercise, the former, patience, the latter, humility, and both moderation, to the end that the Congress may be a success; for unless they do this we greatly apprehend the Texas kick will overturn the fat into the fire."

Torticollis.—The Medical News contains a valuable abstract of recent publications and comments on this subject:

"In the Archiv. f. klinische Chirurgie, Bd. xxx., 1884, may be found a note worthy paper from the pen of Prosessor Petersen, of Kiel, in which the theory of Stromeyer, adopted by nearly all other writers, that torticollis results from rupture of one of the sterno-cleido-mastoid muscles during parturition, followed by cicatricial retraction, is combated. Petersen holds that subcutaneous laceration of the muscle leads to its elongation, and that the so-called hematoma of the muscle, instead of being the cause of the torticollis, is one of its effects, the muscle yielding readily because it is congenitally too short.

In a still more recent paper, published in the Centralblatt f. Chirurgie, No. 14, 1885, Professor Volkmann, of Halle, considers the etiology of congenital torticollis, and bases his conclusions upon observations made upon the living subject. Being dissatisfied with subcutaneous section of the sterno-mastoid muscle in aggravated cases, he has successfully resorted, in at least twelve instances, to its division through a free incision carried along the inner border of the muscle, and as the result of minute examinations of small sections of the muscles, and of the discovery of bands of contracted tissue, he arrives at some conclusions which throw great light upon the affection, and seem to show that, as in talipes, adapted shortening of the fasciæ and other tissues maintains the deformity after the involved muscle has been thoroughly divided.

In some cases the muscle and adjacent tissues had undergone no change whatever. In others, the muscle, to the extent of several inches, was converted into a white, comparatively non-vascular, tendinous mass; its sheath was not demonstrable, being united to the altered muscle by cicatricial bands; the sheath of the vessels was thickened, and the deep fascia was converted into resisting bands. In a third class of cases, the changes were not so marked, the muscle being the seat of a circumscribed callous patch, or traversed by a few tendinous cords. In none of the cases was there the slightest evidence of fatty transformation.

From these observations it follows that certain cases of torticollis result from trauma

during delivery, which is followed by inflammation of the muscles and associated tissues. The changes which are met with are indicative of an active process, and Volkman thinks that they disprove the view of Petersen, who attributes the shortening of the muscle to a vicious position of the fetus in the uterus."

Glycerine Against Dry Tongue and Thirst.—Surgeon-Major S. K. Cotter in a recent number of the Indian Med. Gazette, relates the case of a patient suffering from enteric fever, who was awakened every ten minutes by the dryness of his tongue, which was parched and covered with sores. The tongue was painted with glycerine frequently, and the result was that at the first trial the patient slept almost comfortably, waking up every two hours, with the tongue feeling dry, but not really dry to the touch; after renewed application of the glycerine he at once slept again. In six other cases it has been tried and found satisfactory. Surgeon-Major Cotter does not attempt to decide whether it acts by increasing secretion from the mucous membrane, dissolving the sordes, or making an artificial coating. But in whatever way it acts, its benefit is vouched for when the tongue is parched during any disease.

Urari in the Treatment of Tetanus.—Mr. McArdle read, at a meeting of the Academy of Medicine in Ireland, the notes of a case of acute traumatic tetanus, in which doses of two-thirds of a grain of urari (curare) every fifth hour resulted in a cure, the more remarkable effects produced by the above-named doses being relaxation of the contracted muscles in from six to ten minutes after administration, very rapid and tumultuous action of the heart, cyanosis, labored breathing, and dilation of the pupils. Once the patient was sufficiently under the influence of urari, the evacuations from the bowels were regular. Mr. McArdle suggested the combination of urari and pilocarpin, in the hope that the cardiac and respiratory trouble produced by the former might be prevented by the latter. He also showed that urari, to be of service, must be used in large doses, and that the drug was cumulative.

Novel Fraud.—A case, which well exemplifies the advisability of medical men viewing the body before giving a certificate of the cause of death, is reported in the British Medical Journal. A man, in a certain English town, lately perpetrated a most curious imposition. Having been ill and attended by a medical man, he, upon recovery, shaved off his whiskers and beard, and otherwise so altered his appearance as to induce the surgeon to believe that he was the patients brother and that the sick man was dead. Having obtained a certificate, he registered his own death and drew the burial money from a Forresters' lodge. Upon the discovery of the fraud, he decamped.

Capsicum in the Treatment of Anal Fissures.—In a recently published thesis Dr. Panzat (Raccoglitore Medico; N. Y. Medical Record) has recorded a number of cases of fissure of the anus treated by the internal administration of capsicum. The remedy was given in doses of three grains morning and night. In most of the cases a cure resulted within a comparatively short period of time. The cases recorded were too few in number to serve as a basis for any definite conclusion; but the remedy being so simple and the effects in certain cases so beneficial, the author concludes that a trial of it should always be made, and if at the end of a few days no improvement occurs, recourse may be had to forcible dilatation.

Treatment of Furunculosis.—The Northwestern Lancet finds the following in L'Union Médicale: Gingot paints each furuncle with successive coats of tincture of iodine, and administers internally sulphide of calcium in doses of one grain every two hours. He believes that the system must be saturated with the sulphide in order to effect a cure. He supposes that the drug, in the course of its elimination by the skin, destroys the microbe of the disease. In smaller doses, the drug is

mostly changed to the sulphate and eliminated without producing the parasiticidal effects of the sulphides. The author states that in new cases, eight days usually suffices for a cure. In cases of long standing, three to five weeks are necessary. He has found the combination of the local and constitutional treatment far more effective than either alone.

In exposed situations, where the continued use of iodine might lead to the fear of permanent discoloration, he substitutes camphorated alcohol.

Swallowing of Artificial Teeth; New Method for Their Removal.—The Medical and Surgical Reporter disseminates through its columns a novel procedure found reported in the Deutsche Medicinal-Zeitung:

"A dentist by the euphonious name of Geisselbrecht, in Fürth, was sent for one night by a servant girl, who, during sleep, had swallowed her artificial teeth. The set consisted of a rubber-plate with four canines and two bicuspids, which plate was attached by the aid of gold clamps to the natural teeth. On examination,the neck of the girl was found to be swollen and painful to the touch in the region of the larynx. The examination of the pharynx gave no result; the set had disappeared; but with the use of the esophageal sound it could be felt. But as the plate had already passed too deeply, there was no prospect of its being extracted, and G. pushed it with the sound into the stomach through the cardiac orifice.

Now comes the interesting part of the procedure. That the plate might pass on through the intestinal canal without injuring the latter, G. induced the girl to swallow a lot of cotton thread (spool cotton), which was first cut into small pieces and incorporated in the white of an egg beaten to snow. The intention was to have the threads, steeped into the white of the egg, wrap themselves around the sharp points of the plate and thus prevent their injuring the intestines.

The result has been a brilliant one; four days later the girl brought the ominous plate, and the latter was found to be completely enveloped, overspun, as it were, by the cotton threads. The patient said that she had no pain, or any other inconvenience either, while the plate was resting in the bowels or during its passage out."

* * *

Apropos of the preceding paragraph we are reminded of a recent controversy between the Texas Courier-Record and the New York Medical Record regarding the priority of the publication of the advice to give no castor-oil, or other laxative, when a pin or needle has been swallowed. We certainly knew and practiced the treatment suggested—feeding with a diet formative of large fecal masses, such as oatmeal, potatoes, milk and mush, etc.,—long before the date of publication given by the Courier-Record. We do not remember where we learned it. Our invariable practice when small objects are swallowed is to stuff with the food indicated. Recently a boy four and a half years old swallowed a flat dress-weight of lead weighing six drams, one inch in diameter. This heavy object naturally gave reasonable cause for the apprehension that it might become lodged, say in the ileo-cecal region; it was passed, after the above dieting, on the third day impacted in a large fecal mass.

Prevention of Ophthalmia Neonatorum.—Dr. Haab in his paper(Correspondenzblatt f. Schweizer Aerzte) strongly advocates Credé's method for the prevention of ophthalmia neonatorum. Credé's method of proceeding is as follows: After the child has been washed in the usual way he wipes the eyelids with a piece of cloth dipped in clean water, and then puts a single drop of a two per cent solution of nitrate of silver into each eye. For this purpose he uses a glass rod round and smooth at both ends.

Dr Haab then proceeds to show by statistics collected from some of the largest lying-in institutions on the continent, the value of taking these precautions. Before their use, 3.845 out of 42.811 children, or 9 per cent., suffered from inflammation of the eyes, while

after their use only 109 out of 10,521 children, or 1 per cent., suffered.

Credé's method is compulsory in all lying-in and foundling hospitals in Lower Austria, and Dr. Haab recommends its general adoption. The method practiced by Credé does not injure the eyes, and any midwife, who has been taught to carry it out could be entrusted with a two per cent solution of nitrate of silver.

The practical result of Dr. Haab's paper is as follows:

1. Credé's method should be used generally, not only in lying-in and foundling hospitals, but also in private practice.

2. Midwives should be taught how to practice this method.

3. So long as ophthalmia neonatorum exists, a microscopic examination of the discharge in all cases of inflammation of the eyes in newly born children is indispensable, in order to make an early diagnosis between blenorrhea and catarrh, and to treat accordingly.

Specific Treatment of Diphtheria by the Combustion of Turpentine and Coal-Gas Tar.—Deltzel in the Jahrbuch f. Kinderheilkunde (Archives of Pediatrics) details the following plan: Large vessels were distributed about the sick room, the vessels containing a kilogram of gas tar, seven or eight spoonsful (teaspoonsful?) of oil of turpentine, and one hundred grams of oil of cajeput. To this was added a mixture of coal tar and benzoic acid every hour, the mixture being burned. In addition a vapor of coal tar and lime water was evolved. Thus carbon compounds and empyreumatic substances were liberated, which impregnated the throat and air-passages, were absorbed by the mucous membrane and facilitated the expectoration of the softened false membranes. These substances were taken up by the blood, as was shown by the examination of the urine, and neutralized in this way the specific poison of the disease. The prophylactic effect of this treatment is believed to be very valuable, and may obviate, in some cases, the necessity for tracheotomy.

Ferran's Inoculations.—The experiments of Ferrán are certainly deserving of careful consideration and we are indebted to the Cincinnati Lancet and Clinic for the following French clipping that sets forth the detail of the procedure.

In a letter to a friend Dr. Ferrán gives the following directions regarding the preparation of his cholera virus.

"The liquid vehicle used is broth made of either mutton or beef, prepared according to the formula of Pierre Miquel ("Living Organisms of the Atmosphere"), and I neither add to my culture peptones nor Liebig's extract of meat. I merely slightly neutralize the broth with an alkali. I sterilize the fluid, following the method of Tyndall, by repeated boilings made in a specially arranged retort. A narrow, slender tube, filled with sterilized cotton, enters this flask. Culture is affected by inserting a capillary tube between the cotton fibres. This tube contains the germ. This slender tube has a dilatation at its centre, and is itself perfectly sterilized, for at the time it is blown, both ends are hermetically sealed and not opened until used. Taking a culture tube we insert between the fibres of cotton which it contains one of these capillary tubes until it reaches a point in the funnel where it comes in contact with the gelatine which is to contain the comma bacillus.

For a retort containing 30 to 40 centimetres of broth, we employ all the germ contained in a single capillary tube. Having thus sown the germ I subject the retort to incubation exposed to a steady temperature of 37° Centigrade.

If incubation is prolonged, as the fissiparous generation of spirilla is very active, the broth is soon exhausted of its nutritive principles, and the development of other forms of the thallophyte become difficult. Incubation, therefore, should not be too lengthy, and should be stopped whenever the broth loses its transparency. When we experience this difficulty it is necessary to remove the fluid from the heater and maintain its temperature at only 15° to 18° Centigrade. At the end of forty-eight hours we have speci-

mens of oogones and oospheres,and among other elements observed we also see small spherules, resembling cocci, which arise, without doubt, from the cultivated filaments and spirilla. These minute granules cannot be considered as impurities in the culture.

The formation of oogones exhausts the nutritive resources of the broth, and it becomes necessary to add a fertilizer in order to facilitate the evolution of the muriform bodies. This fertilizer is made of a mixture of fresh broth and hog's bile properly desterilized (broth 100 parts to 20 of bile). This mixture is boiled in a capsule afterwards sealed and when sufficiently cooled is inserted into the cultivating retort in such a way that its contents serve to fertilize and feed the original culture.

This done, the retort is maintained at a temperature of 15° to 18° Centigrade, and the spores continue to develop for a few days. These changes are sometimes even noticed in gelatine tubes.

We prepare this solid cultivation in the following manner:

Broth prepared according to the formula 500 C. C.

Gelatine, (Ehrich's)	35 grammes.
Bile, - - -	50 C. C.

Dissolve in a water bath of sea water, alkalinise, and allow it to remain in the bath for half an hour, then filter through Berzelien paper. The filtered liquid is received in a retort. The gelatine of broth will be soon observed to become as transparent as crystal. It is then sterilized again by repeated boilings in a salt water bath. Test tubes of this gelatine are filled in the following manner. The retort being in the water bath, a curved tube is inserted between the fibres of cotton which close the sterilized vessel. With the thumb covered with a rubber thumb-piece, I close the end of the tube entering the retort; the pressure of the vapor upon the gelatine obliges the liquid to flow from the retort into the test tubes. I preserve for use only those tubes which at the end of a month, present no colonies.

Besides the necessities of all these precautions, I have had, in the four years devoted to these studies, occasion to learn the micro-organisms which render such cultures impure.

In liquid culture, it often happens that the microbes acidify the culture, and that its virulence is spontaneously attenuated. Acidification is not produced in gelatine.

A sufficient dose (1 c. c.), administered by hypodermic injection can, if the culture be virulent, produce very serious symptoms, in man. Profound prostration, fever followed by chills, nausea and even vomiting, and abundant diuresis in certain cases. The blood of patients vaccinated show cocci endowed with Brownien movements, but when the effects of the injection remain localized it is different. The localized symptoms are characterized by painful engorgement and local hyperemia. All such phenomena are transient and pass off in forty-eight hours.

Preservation of Solutions of Cocaine.—The Medical News writes: "In an article on this subject in Ephemeris, May, 1885, the writer, after reviewing his numerous experiments to determine the best preservatives of solutions of cocaine, says: 'It will be seen that all these observations, extending over about six months, are insufficient to establish anything more than a strong probability that boric acid in the proportion adopted, namely, a half of one per cent, will protect these solutions, until they are used up in the ordinary practice; and, therefore, the writer takes advantage of this probability, and hereafter, will abandon the use of salicylic acid for the protection of solution of hydrochlorate of cocaine, and substitute boric acid. This boric acid will be used in the proportion of 0.5 per cent so long as there is no evidence of this proportion failing to protect. But in case it should fail in any considerable number of instances upon prolonged experience, the proportion will be increased to 1 per cent."

"Some of the British journals have recently recommended camphor water as a good protective agent for these solutions, and rationally it should be protective as are all substances belonging to the aromatic series, but

camphor is more irritant or less sedative to mucous surfaces than boric acid, and the proportion necessary to protect does not seem to have been yet carefully determined."

CONTRIBUTIONS.

THE TREATMENT OF ILEUS BY IRRIGATION OF THE STOMACH.

BY L. T. RIESMEYER, M. D., ST. LOUIS, MO.

Read at the "Verein Deutscher Aerzte."

But few cases occur in the practice of medicine, where it is more difficult to arrive at a proper diagnosis, as regards cause and location of the trouble, than those of intestinal obstruction, and in the great majority of cases it is impossible to determine with certainty the cause and seat of the obstruction. We often find ourselves therefore in the predicament of having to treat a case of this kind without being able to arrive at an exact diagnosis. Under these circumstances it must be desirable to learn of a remedy, which can be used in almost every case, irrespective of location or cause of the obstruction. This remedy consists in irrigation of the stomach, first used in obstruction of the bowel, by Kussmaul, of Strassburg, and Senator, of Berlin.

In those cases of intestinal obstruction, that are caused by a moderate stenosis caused by cicatrices, or coprostasis, the obstacle may be removed by cathartics, rectal irrigation or the use of the electric battery. In all other cases, where it is possible only to arrive at a symptomatic diagnosis, opium, cataplasms, irrigation of the bowel, electricity and, especially where an invagination is suspected, insufflation with air, were, up to this time, the usual remedies. If these did not remove the obstacle, aspiration perhaps was tried and then enterotomy or colotomy, according to the seat of the obstruction, resorted to.

Cathartics are considered very dangerous in these cases by most authors and their use rejected, while Senator speaks decidedly in favor of them. The following is a translation of his words at the Berlin Medical Society, December 17, 1884. "I therefore use in all cases where no strangulated hernia, or an undoubted invagination, or similar condition exists, cathartics and even drastic cathartics, and these are, at least in the beginning, applicable in most cases; for in the beginning we can as a rule, not diagnose the nature of the obstruction with certainty. Only when there are particular contraindications, for instance in peritinitis, I abstain from the use of cathartics." Further on he says: I, also, do not disapprove of the injection of metallic mercury, having had very happy results from it in two cases. Now, however, knowing the effect of stomach-irrigations,I place these at the head of the treatment."

Kussmaul has observed three, Senator six cases of ileus in which irrigations of the stomach were used. In the first case of Kussmaul, complete obstruction, cause unknown, had existed for eight days. The treatment, consisting in the use of opium, rectal irrigation, nourishing enemata, ice-pills, cataplasms and insufflations of air, remained unsuccessful and irrigation of the stomach was resorted to. After irrigating five times in twelve hours a passage ensued and complete restoration followed. The second case was due to the residues of a para- and peri-typhlitic inflammation. The patient was already very weak and colotomy resolved on. Before this, though, a thorough irrigation of the stomach was tried and four liters of stercoraceous matter so removed. The patient felt much better after this and the tension of the abdomen had decidedly decreased. Half an hour later the patient slept and after waking up had a passage. Convalescence took a rapid course. In the third case the obstruction was probably due to an invagination. The stomach was irrigated twice daily for nineteen days. After the obstruction had existed for twenty-three days, the bowels were moved. During this extraordinary long duration of the obstruction (in 350 cases quoted in Ziemssen's text-book by Lichtenstein, the duration was only from eight hours to thirteen days) vomiting was prevented by the irrigation and the patient became gradually better and ate with a good appetite. Later peritonitis made its appearance and death occurred twenty-one days after the bowel had become pervious.

Of the six cases observed by Senator, two got entirely well. The cause in the first case was lead-poisoning. In the second there existed peritonitis chronica and hepatitis interstitialis. Of the other four which issued in death the first had a passage after irrigating four times. The patient collapsed twenty-two days after the bowel was again pervious. On autopsy was found peritonitis chronica tuberculosa, adhesions of the small intestines with cecum, etc. In the

second case the diagnosis was: Cancer of the bowel; a post-mortem was not permitted. In the third the autopsy revealed: Strangulation of coils of intestine; the strangulated coils being connected by adhesions; gangrene of the bowel. In the fourth case there was complete torsion of the intestine, metritis, parametritis, broncho-pneumonia and edema of the lungs. Of the last two, one patient died thirty-six, the other forty-six hours after they came under treatment. In three out of these four cases recovery was therefore impossible from the beginning.

Judging by these cases, which were reported in the Berliner Klin. Wochenschrift Numbers 42 and 43 of last and Number 5 of this year, the irrigation of the stomach seems to act happily. Singultus, vomiting and the violent peristalsis cease; the swelling of the abdomen decreases; the patient rests and sleeps; the small, rapid pulse becomes stronger and slower; the temperature falls to the normal; the thirst is less; the coating of the tongue disappears; the patient gradually gets an appetite and nourishment can again be taken per os; the absorption of water and digested food again take places and the urine secreted becomes normal in quantity.

Although the emptying of the bowel by this method does not take place as promptly and thoroughly as when an artificial opening is made just above the obstruction,it is shown in one of the above cases that five liters may be emptied by one irrigation, while in other cases several irrigations are required before a considerable quantity of feces are removed.

Kussmaul cites a case of laparo-enterotomy in which the bowel was opened high up near the duodenum (as was evident through the outflow of pancreatic juice without admixture of chyme or feces) while the obstruction was supposed to be in the cecum. In this instance about two liters of feces were removed. About twenty-four hours after the operation a thorough natural passage followed. The patient got entirely well and five months later the fistula healed. The results of the treatment in this case were analogous to those obtained with the irrigations. Kussmaul uses, after having injected a small dose of morphia hypodermically, a soft tube, as thick as possible. Attached to the stomach tube is a rubber tube and funnel, by which the contents of the stomach are syphoned out in a similar way as wine is syphoned out of a barrel. The stomach is filled with water, poured in through the funnel and this then is lowered below the level of the stomach.

Oser recommends a rubber tube about two meters in length for the irrigations. The patient takes this between thumb and index-finger of his right hand, puts it on the back of his tongue, swallows and pushes it gradually down the esophagus. The soft tube is preferable to the hard tube in so far that it cannot cause any lesions; for instance, if an atheromatous degeneration of the blood-vessels or an aneurism is present.

In cases where by contractions of the muscular layer of the stomach the tube becomes compressed, it must be withdrawn for a moment with a quick motion; the contractions soon cease. Still there are cases in which, in spite of this method, the stomach cannot be emptied, and in these we must use the sound. By syphon-action alone we can readily explain the emptying of the stomach, but not that of the intestine, as the sound or tube does not pass beyond the stomach. Oser says that in acute as well as chronic obstruction a relaxation of the sphincter pylori takes place similar to the relaxation of the sphincter ani in obstructions lower down. The fact that shortly after the water used in the irrigation has run off clear, new contents of the bowels enter the stomach, shows, not taking into consideration the possibility of antiperistaltic movements, which is still contested, that the contents of the bowel are either moved on into the stomach by the changed pressure, caused by the very emptying of the latter, or through the pressure towards the point of least resistance caused by natural peristalsis. After the fecal matter has entered the stomach it is readily syphoned out by the tube. The contraction of the diaphragm and abdominal muscles may also aid in this process of regurgitation. That by syphoning out the fluid-contents the gases also escape is selfevident.

The next question will be, how to explain the removal of the obstruction by this method. In the first place we relieve the inflammatory condition of the bowel caused by the violent peristalsis, the enormous stretching of the bowel, the decomposing, irritating contents and the singultus; also the great irritation of the splanchnic nerve fibres and in consequence the relaxation of the intestinal coats is overcome and in this manner the natural peristalsis secured. Moreover intra-abdominal pressure will be lessened and more room made, which will be a great help for the release of compressed, incarcerated, twisted and invaginated coils of intestine. It may also be said that the pressure in the bowel below the obstruction being greater than that above it, the feces are pushed along through the obstructed portion, and in that manner the occlusion is over-

come. Kussmaul attaches the most importance to the fact that the violent peristalsis is relieved. L. Rosenthal writes in the Centralblatt f. Med. Wissenschaften: "The action of this method is analogous to that of opium, which also removes the obstruction only by relieving the violent peristalsis; it has, however, this advantage, that by the cleansing of the digestive tract, the digestion and absorption of food is improved." This view we do not share. For, in the first place no due regard is paid to the favorable condition created by obtaining more room in the abdomen and, secondly, the modus operandi of the action of opium is entirely distinct from that of the irrigation. While the latter removes the violent peristalsis and vomiting, the former acts only by diminishing the nervous excitability, so that the reflex act, the vomiting, is only retarded, while the non-absorbed food and the products of secretion and transudation accumulate. By the irrigation, on the contrary, a cure is accomplished in a manner analogous to nature. For in some cases we find the bowels move immediately after the occurrence of copious vomiting.

In spite of the favorable results obtained by this method of treatment we will in most cases in the future not be able to dispense with the opium as well as the rectal douche, and the employment of these remedies, as well as air-inflations, electricity and cataplasms, are not excluded by the adoption of this treatment.

As the general condition improves under this treatment and strength increases we can calmly wait until the bowel becomes pervious again and enterotomy or colotomy will therefore be to some extent replaced by this method, and is only indicated in cases where, in spite of irrigations, the condition of the patient grows worse, or when the obstruction has existed so long that it is impossible for the bowel to become pervious again, or when the patient is so exhausted that it is not advisable to lose any time. When enterotomy or colotomy fail, we have as a last resort laparotomy at our disposal. It being often the case, however, that even experienced anatomists, at the autopsy, are able to find the obstructed part only after laborious preparation (dissection), we will only be justified to resort to this operation when the obstruction can be localized with some certainty.

While only few cases of intestinal obstruction have been treated up to this time by irrigation of the stomach and a final decision must be held in suspense, this much can be said, that considerable progress has been made in the treatment of ileus by the introduction of this method.

LECTURE.

SANITARY IGNORANCE AMONG HIGH AND LOW.

BY ALBERT L. GIHON, A. M., M. D.

Medical Director United States Navy, President of the American Academy of Medicine, Ex-President of the American Public Health Association.

Delivered under the auspices of "The Committee on Hygiene and the Relations of the Profession to the Public" of the Philadelphia County Medical Society, in the Hall of the Society, April 18, 1885. Taken from the Medical and Surgical Reporter.

[CONCLUDED.]

The city of Washington is fortunate in its natural sanitary advantages. Its admirable ground-plan, in which the defects of the rectangular system of streets are obviated by the broad intersecting avenues, secures a sweep of air from whatever compass-point it may blow. Its wide thoroughfares and open spaces make an aggregate area greater than that occupied by buildings. Its irregular counter-lines of elevation permit effective drainage. A hundred thousand shade trees bordering the smooth roadways, which are easily swept, control the chemistry of the atmosphere. The water supply is satisfactory, food is abundant, and the death-rate of its white population notably low. All this every citizen probably knows, and hence assumes there is nothing left to be done; but with all its boasted cleanliness, there are a thousand pest-holes in that fair city to become nests for the hatching of epidemic diseases and foci for its radiation. A very casual observer can not fail to notice, even on thoroughfares daily traveled, shanties reared on piles surmounting stagnant pools, cellars never opened to light and air, heaps of decomposing refuse on neglected lots, sewer-inlets so habitually giving off offensive odors that one learns to instinctively avoid them by a détour. The only provision for the public health in the District of Columbia is in the form of a law establishing a Health Department, which is expected:

1. To conduct the sanitary service, meaning thereby the policing and inspection of streets, alleys, lots, yards and houses.

2. To prevent the sale of unwholesome food.

3. To inspect all marine products.

4. To hinder the running at large of domestic animals.

5. To collect all garbage from dwellings.

6. To superintend the removal of night-soil and the collection and removal of dead animals.

7. To secure a full and correct record of vital statistics.

To provide for the sanitary service proper, six inspectors at a salary of $1,200 per annum are allowed, but one of these is detailed for the medical control of houses in which infectious diseases, as diphtheria, scarlet fever and the like, occur, leaving only five for all other sanitary work over an area of three square miles of populous dwellings. The inspection of food in all this territory is intrusted to two men, who are expected to visit all the markets and provision stores, and arrest the exposure for sale as food of whatever may be unwholesome; while for the inspection of marine products, fish, oysters, clams, crabs, terrapins, and the sanitary care of fish-markets, wharves, and oyster houses, there is but one. The prevention of the running at large of domestic animals is given in charge to a pound-master with four laborers; the collection of offal and dead animals is let out by contract; and the recording and tabulation of births, marriages and deaths, and the attendance of the sick poor, are the work of the health officer, with four clerical office assistants. For the salaries of health officer, inspectors and clerks the munificent total of $17,000 is appropriated.

Civic organizations can scarcely be blamed for delay in recognizing health bureaus as an important and necessary part of their organization, since medical institutions have been tardy in elevating the Chair of Hygiene into a first place in their faculty. Pathology and its catenated Therapeutics, have till lately occupied the most prominent position, and even Physiology has been regarded as only introductory to the study of the phenomena of morbid action. At first a few schools established subordinate lectureships on Hygiene, frequently associated with Medical Jurisprudence, or some of the minor specialties. After awhile Hygiene appeared here and there as a distinct chair, and now alone or allied with Physiology, it holds its proper rank in every medical college of standing—80 of the 128 medical schools in the United States and Canada having such professorships. The science of Medicine to-day rests on the broad foundation of Biology. The scientific physician is the profound biologist. Disease is departure from health, and to prevent this departure becomes the first thought and highest aim of him who claims to be learned in Medicine. The mechanism of curative procedures comes into play, like the surgeon's knife, as the last resort. Shivered and splintered spars have to be repaired by cunning workmen—but the skillful navigator is prouder of having weathered the rock and ridden out the gale without them.

In every city, town and village, in every State government, and in the national establishment there should be, and some day will be, a bureau entrusted with the care of the public health—and this is not a mere titular office, but an elaborately organized department, under a sanitary chief, who shall not have one aid but many—health officers, sanitary inspectors, or whatever they may be called—competent, zealous, and properly remunerated. Their labors will be onerous, but their duties are honorable; their mission the glorious one of saving and prolonging life, of going about doing only good works, and thus adding to the sum of human happiness and social order. They must be authorized to enter every house, however exalted its owner's station, to examine its drainage and sewage system, its garrets and out-of-the-way closets, its cellars, yards, and surroundings. They must have power to open every apartment and subterranaan basement to the light and air—to drain them if wet, to clear out rubbage, remove soggy and rotten floors, and moldy straw, white-wash walls, cart away the accumulated heaps from obscure alleys and neglected lots, and superintend the sweeping of the streets. Even in Washington, where machines can do this latter work, the perfunctory methods of other cities are coming into vogue, though not as in Philadelphia, where, as I said upon another occasion, "living dirt envelops the whole city with its slimy mantle, and the patriot pilgrim to the shrine of Independence doubts which is the greater marvel—the spot where a great nation was born, or the pestiferous mud he has waded through to reach it." "In the very heart of that city—rather in its head—under the shadow of the Temple of Liberty, where the brightest minds among its fathers and sons daily win forensic laurels, one has to pick one's way through reeking pools of fetid ooze concealing the cobblestones, until partially swept into stinking masses by decrepid laborers with unwieldy brooms—little heaps of filth that lie till they roll back to a level, or are carried into the sewer to fester underground, and generate the sickening odor that

arises from every street inlet. It is the fashion to ridicule the unprogressive Spaniard who, at the gates of Madrid, ploughs the field with a crooked stick, as his ancestors did centuries ago; yet here intelligent men daily witness this farce of street-cleaning, this tragedy of street-pollution at their very doors, and hold their peace—each hoping to escape, yet escaping only as he who has trodden blindfold over red-hot plough-shares." Great as the sanitary officer's task at the outset, fines and penalties would defray its cost, which is a proper burthen on neglectful owners. A moderate outlay would afterwards suffice, though the sanitary overseer's duty will be one of ceaseless watchfulness. It is not enough for him to be an occasional visitor; he must be ubiquitous and all-seeing—in school rooms, churches, theatres, and public halls; in court-rooms, railway stations and market-places; in dairy, bakery, butcher's stall and grocer's store; in squatters' hovels and rich men's palaces; and without his certificate no building should be permitted to be sold or occupied.

Who so qualified to do this work as the educated physician? The sanitary field is legitimately his own. Three-fourths of the registered physicians in this city might be actively employed upon the exclusive work of keeping disease out, and leave scant occupation for the rest in combating what had crept by in spite of them. There would be fewer prescriptions written, and the gaily-decorated apothecary shops would drive a more salutary and reputable, if not so profitable, trade, in selling soaps and cosmetics, and articles de luxe, instead of the pills and potions, and other horrid farrago, on which, like rotten staves the blind ignorantly lean and seek support.

In all this discursive talk in which I have indulged, I do not pretend to have told you anything you did not already know. I have only sought to impress upon you who are wise the sense of your responsibility for your neighbor's ignorance, as that affects the public weal for which we are all accountable. The story of pure air, and good food, and outdoor exercise, may be a trite tale; but what have you done to keep this air pure and this food free from adulteration? Doubtless you all devoutly go to church, and contribute liberally of your means to clothe the savage —perhaps the very race whom M. Hornaby described to us a few weeks ago, whose scant attire is a piece of bark; who are chaste and virtuous, though they know neither God nor Priest; honest and upright, though they have no law; peaceable and happy, though they live ungoverned and uncontrolled; healthy and vigorous without drugs and doctors; sharing their island home with the ourang, their only neighbor, they, nevertheless, exhibit all the traits of the noblest humanity—their children obedient, their wives immaculate, woman respected as the peer and partner of man. Contrast these savages with the products of civilization. Uncleanness, disease and vice are unconcealed. In the foul suburbs of the poor, which the wealthy never enter, the rumshops stand on all four corners of every block, while children cry and fight for food. The unclean beasts, who talk, kennel themselves in foul, stinking tenements, where crime, the incestuous offsprings of disease and filth, does not even seek to clothe itself. In the shanty of the city, or the remote log cabin of the frontier, the grimy creatures, who disdain to recognize their ancestral kinship to the ape, live in greater squalor. Dr. Scott relates the case of a native of Missouri, who had not been wet all over since 1863, and, astonished at the fact, he made inquiry, and found that not one-third of the people bathed once a month, and that fifty per centum did not take a full bath from October to May. I am sure the figures are not exaggerated. Here then is a missionary field—to preach the gospel of cleanliness. You have only to look critically at the masses as you encounter them every day to detect the great unwashed. Can there be a more blessed charity than to enlighten them as to the beauty and grandeur of this human body, and the necessity of grooming it into suppleness, cleanliness and strength? Can physicians confer a greater boon upon humanity than by becoming the leaders in such a propaganda? Let them fearlessly proclaim as the cardinal doctrines of their own faith, that health is strength, health is true nobility, health is happiness, health alone is wealth.

If medical men have not been regarded as health protectors as well as health restorers, it is because they have too tacitly acquiesced in the general belief that the latter is their only function, and they have consequently deserved the imputation of rejoicing in the outbreak of an epidemic or the occurrence of a sickly season for the greater harvest of fees it would bring. Undoubtedly the practitioner of medicine must gain a livelihood, and if his income is to be determined by the number and severity of his cases, it would be unfair to censure him for welcoming the summons to the bedside of a victim of typhoid, or the stealthy visit of one cursed by some constitutional taint; but what physician, who regards medicine as something more than a

trade, does not feel sad at heart to know how easy it were to have averted the fever or the poisoned blood? Is it not a cruel necessity that compels him to take the fee from the half starved sufferer, who ought to keep it to buy bread for herself and the famished children whose very eyes cry hunger? Is it right that in this Christian land the young graduate must himself look for means of living to those who come to him because he is cheaper than the doctor whose sign is weatherbeaten or has given place to the more aristocratic door-plate? Is it right that the poor can only look for succor to that skill which they can buy?

What is right?

The public health should be the paramount question of social polity. Individuals should be educated from childhood to the knowledge of the importance and dignity of their bodies, and the necessity of keeping them sound, as well for their own greater personal benefit and pleasure, as that the descendants they leave may be worthy of them. The men who have made the intimate structure of their bodies and the laws of life their lifelong study and vocation, should be the ministers of health, looked to for advice, and properly rewarded for their services. The stipend of the family physician should not depend upon the accidents of disease, but he should be the paid sanitary adviser and counsellor of the household, earning his salary when they are well, as when they are ill. A corps of well-renumerated sanitary officials should guard the avenues by which disease can enter, and hospitals, asylums, infirmaries, dispensaries and cliniques should be multiplied for the poor, and supported by the churches in common, as the mission work that will bring most gladness to the earth, for disease is the parent of crime, as it is itself the child of the unclean.

Is all that Utopian?

This at least is hideous truth. The child who loses its life from a preventable disease is murdered by its indifferent parents. The unhealthy school-house is a living charnel. The advent of an epidemic is a crime chargeable upon the citizen who has neglected to urge with all his might the sanitary precautions that would have kept it away. Ignorance of the law does not protect its criminal violation: why should ignorance of sanitary laws be any less reprehensible?

—W. R. Warner & Co., have received the first premium at the World's Exposition, New Orleans, for great uniformity and solubility of their sugar-coated pills. This is the ninth world's fair prize which attests to their excelence.

SOCIETY PROCEEDINGS

ST. LOUIS MEDICAL SOCIETY.

REPORTED FOR THE REVIEW.

Stated Meeting, held Saturday, June 27, 1885. The President, Dr. Atwood, in the Chair.

COCAINE IN DISEASE OF LARYNX.

DR. MULHALL had a patient troubled with a dry cough, in whom examination was difficult. He used a 10 per cent solution of cocaine to the palate, pharynx, epiglottis, etc., and found upon the right vocal cord a papilloma which he removed without pain to the patient.

DR. ALT has used the oleate of cocaine, for the removal of tonsils, with success. He was careful to first take away all secretions. He had also employed the aqueous solution of the drug, but regarded the oleate as better.

DR. WISE thought that theoretically the aqueous solution should have acted better.

DR. ALT remarked that the aqueous solution would not remain on the tonsils and take effect, whereas the oleate did.

DR. DIEBEL had better results by using the aqueous solution together with vaseline where the former had no effect. He asked whether the greatest effect of cocaine was observed upon the skin or mucous membrane.

DR. WISE answered upon the latter.

DR. LUTZ did not wish to let Dr. Wise's assertion unchallenged. He had employed it on surfaces without divesting them of their epithelial layer and the cocaine was readily absorbed. He thought the oily preparation would act more permanently as it retained the agent in situ longer.

DR. OHMANN-DUMESNIL remarked that as far as the skin was concerned the thicker the epidermis the less absorption there would be; at best, there was but little.

DR. MULHALL in referring to Dr. Alt's trial said that he did not regard it as a fair one, as he had removed hypertrophied tonsils without pain to the patient.

DR. ALT thought however, that it was a fair test as the palate ceased to rebel, when it did so before using the drug.

DR. MULHALL never had the palate interfere with the operation of tonsillotomy; in fact, he had operated whilst regurgitation was taking place.

DR. BREMER wished to say a few words regarding the absorption of oleates by the mouth. A few days since he examined the

mucous membrane of a pup and found a condition about the filiform and fungiform papillæ of the tongue that he never saw described. He found a number of fat globules within the papillæ and this would go to show that a part of the fatty matters in nourishment are absorbed by the mouth. It stands to reason that an oleate would penetrate more easily than fats and oils and thus explain the way in which they might be absorbed.

Dr. Wise suggested that the mechanical act of sucking forces oil globules into the papillæ.

Sensory Paralysis of the Fifth Nerve.

Dr. Williams recently had occasion to examine a case of complete sensory paralysis of the fifth nerve of the left side. The eyeball and cornea as well as the integument were insensible. The patient has been in this condition twenty-five years. The vision of the left eye was as good as that of the other and the motion on that side perfect. The man occassionally sees double, but there is no perceptible deviation. The diagnosis made was that it depended upon some obscure brain disease, there being other evidence in favor of this, such as occasional epileptic fits. There is no history of injury or of syphilis. It is known that the fifth nerve is not often involved and rarely if ever in the manner just related.

Dr. Fry inquired if there was any impairment of mastication. If the whole nerve was paralyzed there would be such a condition.

Dr. Williams said that the man could chew on both sides ann the tongue was apparently normal. He, however had no sensation on the left side and would lose the bolus of food. Both pupils responded promptly and naturally and the face appeared normal, on both sides. As a further evidence of some brain trouble he noticed that both optic nerves were congested and not well defined. The man is 65 years of age.

Dr. A. Green inquired how the diagnosis was made.

Dr. Williams stated that the man called attention to the condition and that he tested it by pinching, pricking, scratching the cornea, etc. Nothing was felt until he passed the median line. During his epileptic attacks he was unconscious.

Dr, Fry thought that if the whole of the fifth nerve was paralyzed there would be impairment in mastication. The muscles concerned in that function are supplied by motor filaments of the fifth, except the buccinator which is supplied by the seventh.

Dr. Mulhall asked if there existed any reason for deception.

Dr. Williams said none except that the patient was an applicant for a pension.

Case of Brain Lesions.

Dr. Bremer regarded the cause as some central lesion,neither a circumscribed tumor or a spot of broken down tissue in the vicinity of the nucleus of the fifth pair, near the pons, the cause being an injury or embolus. It is not an uncommon condition to find a central lesion at the necleus of a nerve where it alone is implicated. He had a case illustrating this. A boy 11 or 12 years old, four years ago had what was supposed to be malaria and soon after articular rheumatism. He then had endocarditis and suddenly became paralyzed on the left side. As soon as the paralysis was established the fever left him and he got a ravenous appetite. He got along well until one evening, whilst defecating, he fell down in collapse and could not speak. The tongue and fauces were paralyzed. Now, what is the explanation? During the endocarditis some of the fibrinous exudations were carried up and lodged in the cerebral artery; necrosis or softening then followed. This accounts for the paralysis on the left side. The paralysis of the tongue and fauces was due to an apoplectiform attack of the bulb of the medulla oblongata at a circumscribed spot. The nuclei above that point had their nutrition cut off by an embolus. The boy is still living.

Dr. A. Green reverting to Dr. William's case, inquired if it was likely that a case of paralysis of the sensory portion of the fifth nerve could exist for twenty-five years and not produce any anatomical changes and also that the motor part would not become implicated?

Dr. Williams could not answer the questions. The conjunctiva was red and sometimes a sense of itching in it occurred. He wished to know why motion should be affected because sensation was destroyed.

Dr. Alt inquired if there was any neuroparalytic inflammation of the cornea.

Dr. Williams stated that the cornea was well. Two-thirds of the vision was gone in both eyes. The congestion of the optic nerves caused this.

Dr. Alt said that, as a rule, in such cases we expect to find inflammation of the cornea by disease or irritating influences which are not felt. Experiments have shown that cutting the trigeminus will produce neuro-paralytic inflammation. The patient would appear as a malingerer; especially as the function of the pupils is not interfered with.

VEREIN DEUTSCHER AERZTE.

REPORTED FOR THE REVIEW.

Regular meeting, April 3, 1885. Seventeen members present. Dr. G. Richter in the chair.

Dr. L. T. Riesmeyer read a paper on "The Treatment of Ileus by Syphoning the Stomach"—(see page 10).

Discussion.

Dr. Richter remarked that the cases of Kussmaul and Senator were also reported in Le Progrès Médical.

Dr. Fischel stated that he often treated cases of gastric dilatation and gastric ulcer by irrigation, and could testify to good results. He, however, had always used the hard stomach tube.

Dr. Richter employed the soft tube and found a drawback to be that the eyes of the tube became easily plugged.

Dr. Luedeking stated that the use of the soft tubes originated in Vienna, and stomach-irrigation and syphoning by means of them was carried on there on a large scale. The plugging of the eyes could be easily overcome usually by simply raising the funnel attached to the tube and by pouring more fluid in. One feature of the soft tubes, that should be watched, is, that they grow hard and brittle when old, and cases are known in Vienna in which pieces broke off and remained in the stomach. If his memory served him right Billroth performed gastrotomy in one such case. There was no doubt of the great relief afforded by washing out the stomach. In a case of hepatic cancer, that he had treated together with Dr. Greiner, obstinate vomiting and gastralgia were much relieved by two washings a day. The patient was able after the manipulation to eat heartily and retained the food.

Dr. J. Hermann reported a case of acute invagination brought on by a jump from a wagon. There was a sausage-like tumor and extreme pain in the left inguinal region. Two quarts of cool water were poured into the rectum by means of a fountain syringe. Two strong men were directed to raise the man's buttocks from the bed and then to bring them down upon the mattress suddenly and with some force. The idea was to force the water up into the colon and around the curve of the large gut. Butchers, when cleaning entrails, proceed similarly when they wish to liberate a strangulated coil of gut. The stated modus operandi was repeated at intervals and methodically. The patient stated that he was gradually feeling the cold water pass around over to the right side. More water was introduced and suddenly the patient cried out: "Now it's through!" The tumor had disappeared and all was well.

Dr. Curtman suggested the attachment of a wound glass tube to the end of the stomach-tube in order to secure a continuous current. Such a device is used in chemical laboratories to facilitate filtration.

Blanching of Eye Lashes.

Dr. John Green related a case in which, shortly after an operation on the eye, three or four lashes became perfectly white.

Thrombosis of the Right Pulmonary Artery.

Dr. R. Luedeking demonstrated the following specimen:

The heart of a gentleman who reached the age of 76 years, who had been asthmatic from emphysema of the lungs and an old mitral trouble for fifteen or twenty years. The mitral orifice and valve-flaps showed a condition of cicatrization from endo-carditis of old date. The point of great interest, however, was the almost complete obliteration of the right pulmonary artery by a thrombus, that was thoroughly decolorized and in part organized, being firmly adherent. The thrombus extended from the origin of the right pulmonary trunk into quite a number of the ramifications for a short distance only. The obliteration must have come on gradually and for some time. There was atheroma of the pulmonary artery. A large number of white atheromatous patches were shown. Only in the last three weeks of life was the distress from dyspnea great.

The right kidney of the same individual contained a small retention-cyst.

Malaria Statistics.

Dr. G. Baumgarten inquired into the progress of the Collective Investigation of Malaria. Progress was reported and continuance of the work resolved.

Thereupon adjournment.

—The First Blow at Medical Pauperism.—In spite of all that has been said of the abuse of medical charity, both here and in Great Britain, little if anything has heretofore been done to overcome it. We are glad to see, however, that the first effective blow seems likely to be struck by our English brethren, in the form of a legislative measure disfranchising the recipients of medical services at the public expense. The project is not overstrained, for those who, for the sake of the public safety, are sent to hospitals for infectious diseases are exempt from the operation of the act.—N. Y. Med. Jour.

CORRESPONDENCE.

SALICYLATE OF SODIUM IN HEMICRANIA.

CHICAGO, Ill., June 26, 1885.

Editor Review: The REVIEW, May 9, contains a valuable contribution from Dr. Dougherty, this state, on the of salicylate of sodium in the treatment of migraine. The doctors's unbounded confidence in the remedy induces, in confirmation, a full exposition of the following case without reservation or further test:

Up to February last Mrs. A. was from infancy an inveterate sufferer with hemicrania. The materia medica was apparently exhausted without avail and the respected lady fell a lamentable victim to sharks and charlatans from the valley to the coast. No innate nervine tendency was elicited. The patient's general health was fair, her age 38 years. The attacks, periodical in character, were ushered in by well marked prodomata, sense of fullness about the head, tinnitus aurium, scotodinia, languor, torpor intestinorum and nausea. Her laconic designation, "my three days headache" is very acceptable for descriptive purposes.

First day, acute pain left side of head, left temporal artery excessively dilated and pulsating. Ear and head of affected side intensely hyperemic, pupil contracted, photophobia, photopsia and tinnitus aurium.

Second day, symptoms aggravated, pain only alleviated by tightly bandaging head, nausea, pulse weak.

Third day, great prostration with occasional attacks of prolonged syncope, pulse slow, compressible, and nausea. Salicylate of sodium was tried upon theoretical principles, and the patient avers that for the first time relief was secured. An attack has been terminated by an exposition of the remedy upon the second day. Relief or abortion is always in proportion to the physiological effects of the drug developed.

I do not feel warranted in pronouncing it a specific, but it has opened an era to which the patient may gratefully revert.

Yours very truly,

JESSE A. CLASON, M. D.

620 Austin Ave.

—For constipation in young children Dr. Poulain, in the British Med. Journal, extols the use of a tablespoonful of fine bran night and morning, in a cup of bread and milk. The bran is warmed in the milk and then poured on the bread.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, AND U. S. MARINE HOSPITAL SERVICE, FROM JUNE 9, 1885. TO JUNE 23, 1885.

Major B. E. Fryer, surgeon U. S. Army, ordinary leave of absence extended six months from July 1, 1885, on surgeon's certificate of disability. S. O. 129 A. G. O., June 6, 1885.

The order directing Maj. P. J. A. Cleary, surg. U. S. A., to change station from Ft. Union, N. M., to Ft. Lyon, Col., is revoked. S. O. 81 Dp. Mo., June 8, 1885.

Capt. Blair D. Taylor, asst.-surgeon—ordered from Dept. Texas to Dept. East.———Capt. Wm. F. Carter, asst.-surgeon, ordered from Dept. East to Dept. Texas. S. O. 141, A. G. O., June 20, 1885.

Capt. J. Y. Portor, asst.-surgeon, having been found incapacitated for active service by an army retiring board, ordered to proceed to his home and report by letter to the Adjutant General of the Army. S. O. 136 A. G. O., June 15, 1875.

First-Lt. C. N. B. Macauley, asst.-surgeon, relieved from duty at Ft. Sisseton, D. T., and ordered for duty at Ft- A- Lincoln, D. T. S. O. 61 Dp. Dakota, June 5, 1885.

ITEMS.

—The Illinois State Board of Health will hold its next regular meeting on Thursday, July 2, at the Grand Pacific Hotel, Chicago.

—The Albany Medical Annals, June, 1885, bewail the action of Governor Hill, of New York, in vetoing an allowance of $15,000, granted by the legislature for the purpose of furnishing expert advice on sanitary and engineering matters. This is the more to be regretted inasmuch as the theory upon which the health system of the State has been built up, by which the central Board acts as a vital head, as an advisory resource and a place for record of vital statistics is admirable. Day after day applications are made for help in this direction from local boards and health officers, by which, after a most economical plan, the work is done. The Board needs a corps of sanitary engineers and investigators; it needs chemists and a laboratory for the analysis of water, foods and the like, all of which should be of the best and supplied without stint to make it what the intent and animus of it is. Medical men need not be told that no money

could be more economically invested to bring back good returns.

—The Court of Appeals at Saratoga, N. Y., has declared the Butterine Prohibition Act unconstitutional. To sell butter imitation by the name of "imitation" is honest and legal.

—S. Austin Davis, Resident Physician New York Infant Asylum, reports a case of erysipelas following vaccination, complicated with double lobar pneumonia in an infant seven and a half months old; death ensued. Eleven other infants vaccinated with the same bovine lymph at the same time had a typical and uncomplicated "take."

—Rossbach gives in acute intestinal catarrh of children naphthalin in dose from one- to two-tenths of a gram every three hours. The substance should be washed in alcohol until it is colorless, then dried and sublimed, which will leave it in large, white, beautifully formed crystals. Oil of bergamot may be added if it is to be given in the form of a powder. For injection purposes it may be given in the form of an emulsion, one gram being added to fifty or one hundred grams of distilled water, the mixture boiled and allowed to cool to 37 degrees C. Usually this substance is well tolerated, but vomiting and retching are sometimes caused by it.

—Boils.—A Kansas paper gives the following graphic description of a boil. The pathology may not be strictly in accordance with the latest views, but this fact does not detract from the readableness of the article.

A boil is generally very small at first, and a fellow hardly notices it, but in a few days it gets to be the biggest of the two, and the chap that has it is of very little account in comparison with his boil, which then "has him." Boils appear mysteriously upon various portions of the human body, coming when and where "they darn please," and often in very inconvenient places. Sometimes a solitary boil is the sum total of the affliction, but frequently there is a "rubbish-in lot of 'em" to help the first one. If a boil comes anywhere on a person, that person always wishes that it had come somewhere else, although it would puzzle him to say just where.

Some persons call them "Damboils," but such persons are addicted to profanity—the proper name is boil. If a chap has a boil he generally gets a good deal of sympathy from others—"in a horn." Whoever asks him what ails him laughs at him for his pains to answer, while many unfeeling persons make game of him, or of his misfortune, or boil. It is very wicked to make sport of persons with boils; they cannot help it and often feel very bad about it. Physicians don't give boil patients much satisfaction as a general thing, although young physicians who are just beginning to practice are fond of trying their lancets on them. Boils are said to be "healthy," and judging from the way they take hold and hang on, and ache, and grow, and burn, and raise Cain generally, there is no doubt they are healthy and have good constitutions. They are generally very lively and playful at night, and it is very funny to see a chap with a good large one prospecting around his couch for a place where his boil will fit in "without hurting it." Boils tend to "purify the blood," strengthen the system, calm the nerves, restrain profanity, tranquilize the spirit, improve the temper and beautify the appearance.

They are good things for married men who spend their evenings away from home, as they give them an opportunity to rest their night keys, and get acquainted with their families. It is said that boils save the patient a fit of sickness, but if the sickness is not best to have it must be an all-fired mean thing. It is also said that a person is better after he has them, and there is no doubt that one feels much better after having got rid of them. Many distinguished persons have enjoyed these harbingers of health. Job took the premium at the county fair for having more achers under cultivation than any other person. Shakespeare had them, and meant boils when he said: "One woe doth tread upon another's heels, so fast they follow."

There are a great many remedies for boils, most of which are well worth trying, because, if they don't do any good they don't hurt the boil. Every man he meets will tell him of a "good thing" for it, among which are—shoemaker's wax, Mrs. Winslow's syrup, trix, Spaulding's glue, Charlotte russe, gum drops, water-proof blacking, night-blooming cereus, chloroform, kissengen, etc.—Medical Age.

—Iodoform in the Treatment of Gout.—Testa ("Gazz. Med. di Torino;" "Dtsch. Med. Ztg.") has published the results of a series of careful observations, both experimental and clinical. He finds that this drug increases amount of uric acid excreted, and accelerates the processes of oxidation. The amount of oxalates is diminished, even when food is taken which is rich in oxalic acid. In cases of gout the writer employs daily doses varying from one to four grains, which, he maintains, may be continued for months without general disturbance. Under the use of iodoform the attacks become less frequent, and their duration and intensity lessened. Stress is laid on the fact that the presence of renal disease is a contraindication to the employment of the drug, the

danger being that it will not be eliminated, but will be retained in the system and gives rise to toxic symptoms.—N. Y. Med. Jour.

—Dr. Lawrence Turnbull, of Philadelphia, has been invited to take a prominent part in a special debate on "Anesthetics," in the Section of Pharmacology and Therapeutics of the British Medical Association to meet in Cardiff during the last week of July. Dr. Turnbull's writings on anesthetics, and particularly on "Etherization by the Rectum," are well known in England, and the officers of this section urge him strongly to give them his experience.

—Dr. F. E. Daniel has severed his connection with the Texas Courier Record and sends us a circular declaring his intention of starting a new journal, possibly a weekly, in Austin, Texas. He calls for the support of the profession. He certainly merits it.

—A clerical lunatic of the anti-vivisection genus declared not long ago that the "meanest devil in hell knew more than the entire British Association." A contemporary humorously congratulates the reverend gentleman on his evidently intimate acquaintance with his subject.—Med. and Surg. Reporter.

—Mercury in the Treatment of Gout.—Illingworth ("Brit. Med. Jour.") has used the following mixture with favorable results:

Solution of bichloride of mercury (Br. Ph.) - - -	6 drams
Iodide of potassium - -	30 grains
Infusion of quassia - -	6 ounces.

Dose, half an ounce every two or three hours. Morphine or chloral may be added if the pain is severe. (The British solution of bichloride of mercury consists of ten grains, each, of the bichloride and sal ammoniac dissolved in an imperial pint of distilled water.)—N. Y. Med. Jour.

—A young physician who has just establishsd himself and has very little practice is noted for his braggadocio. One of the older physicians meeting him on the street yesterday asked him how he was coming on. "I've got more than I can attend to," was the boastful reply. "I had to get out of my bed five times last night. "Why don't you buy some insect powder?" asked the older doctor.—Ex.

—Turpentine in the Treatment of Dysentery. —Genkin ("Wratsch;" "Dtsch. Med. Ztg.") commends the use of oil of turpentine, in doses of ten drops to a teaspoonful of castor-oil, and states that he has produced better results with it than by using opium. In only seven out of fifty-nine cases was there any disturbance of the urinary organs.—N. Y. Med. Jour.

—Tincture of Iodine in the Treatment of Intermittent Fever.—Schabliovsky ("Russkaja Medicina;" "Dtsch. Med. Ztg.") has treated twenty-six cases of intermittent fever with tincture of iodine, ten drops being given three times a day. A cure resulted in every instance, without unpleasant consequences.—N. Y. Med. Jour.

—The Cincinnati Lancet and Clinic contains the following French clippings rendered in English by T. C. M., who in a note expresses the fear that he cannot do the sonnets full justice:

"The Hippocratic Parnassus.—We are obliged to make the sad announcement of Camuset's death. He perished a few days since from an intestinal disorder. Our many readers will never forget the charming medical sonnets which have from time to time graced these pages. Those published during the past two years led to a special recognition of Camuset's ability as a genre poet.—Journal de Med. de Paris.

THE CORN.

I am a poor little corn and protest
'Gainst the shoemaker raising a blister.
'Tis the fashionable boot that I most detest.
Heaven help dear phalanges! my sister.

In vain the chiropodist doeth his best,
He wields a sharp knife, the professor.
Short is his triumph, from pain there's no rest,
I'm renewed, spite the iron aggressor.
(etc.)

CEREBRAL CONGESTION.

Poor Uncle Bernard! he was growing old,
One eve he felt his vision far from clear,
Yet, at the supper table he was bold,
And filled himself with wine and other cheer.

To use the napkin on his chin scarce able
So numerous flashed the sparks before his eyes
He gently dropped his head upon the table,
And passed away—thus entering Paradise.

Oh Lord! Sweet Lord! Here on my knees
Pray listen to a sinner's pleas,
Give me anorexia!
But when my time shall come at last,
Oh! grant me at some fine repast,
For dessert, apoplexia.

THE WEEKLY MEDICAL REVIEW.

MEDICINE AND SURGERY.

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THE COMING INTERNATIONAL MEDICAL CONGRESS.—The action taken by the committee originally appointed by the American Medical Association at the Washington meeting in 1884, to extend on the part of the profession of this country an invitation to the International Medical Congress to meet in Washington in 1887 and, at the same time to inaugurate the great work, has been most violently attacked. A halt has suddenly been called to the work, which had been so successfully and energetically inaugurated. Through the misapprehension, misunderstanding or disappointment of individuals, a cloud has gathered which has already thrown its shadow across the Atlantic. Whilst our own medical journals are arguing and counseling pro and con, and in addition, the profession at home is being enlightened by circulars, the profession abroad is beginning to inqnire as to the meaning of this,and the London Lancet of May, 1885, gave the following good counsel:

"At its meeting in 1884,the American Medical Association appointed a committee of seven gentlemen to present an invitation to the International Medical Congress at Copenhagen to hold its next meeting at Washington in 1887. As our readers are aware, this invitation was accepted; and the committee, desiring to advance all the arrangements for the meeting and believing itself to be empowered to do so, proceeded to nominate the chief officers and to conduct the preliminary negotiations. Unfortunately, it seems in so doing they have excited certain local jealousies; and at the late meeting of the Association in New Orleans their act was discussed and condemned, and a resolution was passed electing a committee, consisting of the seven gentlemen previously appointed, and thirty-eight others (one from each state and territory), who should proceed at once to review, alter and amend the action of the present committee as it may deem best. From the reports of the discussion we may gather that some members of the Association consider that the appointments to the Congress should be filled up on a geographical basis, each state being considered as a distinct entity to be represented. We trust, however, that the new committee will take a wider and more enlightened view thán that, and will make the appointments solely in reference to the merits of the various nominees, and the degree to which they possess the confidence of the profession of the United States, as a whole, and in Europe. We may be permitted to assure our American brethren that visitors from Europe will, in a large measure, judge of the position and character of the profession in the States by the scientific eminence of those whom they choose as their prominent representatives. We trust that all difficulties such as we have hinted at will be wisely and amicably surmounted, and that the meeting of the Congress in Washington will be as signal in its success as a scientific gathering, and in its display of true cosmopolitan brotherliness, as any previous one."

Now the New Orleans Committee, supposed to consist of the original committee and the added members, forty-five in all, held a meeting at Chicago, June 24 and 25. Only twenty-nine, however, were present; of this number several were members of the original Committee.

Dr. Austin Flint of New York presented his resignation. It was accepted.

The committee adopted the rule that "the American Members shall consist of delegates

from the American Medical Association, and from Medical Societies in affiliation with the American Medical Association, each of said societies being entitled to one delegate for every ten members." This was contrary to the ground taken by the original committee, which aimed to make the Congress representative not alone of the American Medical Association, but of the entire profession. Dr. Billings, as in New Orleans, opposed the change, but to no avail.

The organization of the Congress was then elected as follows:

Dr. Austin Flint was retained as President. Dr. Henry I. Bowditch, of Boston, was stricken from the list of Vice-Presidents, and there were added Drs. John L. Atlee, of Lancaster, Pa.; O. W. Holmes, of Boston; W. O. Baldwin, of Montgomery, Ala.; J. M. Toner, of Washington; Wm. Brodie, of Detroit; L. A. Sayre, of New York; W. W. Dawson, of Cincinnati; and H. H. Skillman, of Lexington, Ky.

Dr. John H. Packard, of Philadelphia, was elected Secretary General, and Dr. F. S. Dennis, Chairman of the Finance Committee.

The Executive Committee was constituted as follows:

Drs. Beverly Cole, of California, Chairman; J. V. Shoemaker, of Philadelphia; A. Y. P. Garnett, of Washington; J. H. Packard, of Philadelphia; F. S. Dennis, of New York; J. S. Lynch, of Baltimore; J. W. S. Gouley, of New York; William Pierson, of Orange, N. J.; J. C. Tucker, of Alameda, Cal.

A Local Committee of Arrangements was appointed, consisting of Dr. A. Y. P. Garnett, of Washington, Chairman, and all of the Washington members of the Committee and of the Councils of the Sections.

Numerous changes were made in the various section; some were thrown out altogether; the personnel of all altered or modified.

So far for the work of the Committee. Right upon the heel follows an action of disapproval on the part of the profession of Philadelphia. At a meeting held June 29, Dr. Alfred Stillé in the chair, it was resolved:

"Whereas, Certain serious changes have been recently effected in the preliminary organization and rules for the International Medical Congress of 1887, it has seemed desirable for the members of the General Committee and the officers of the Sections resident in Philadelphia to meet for consultation; and

Whereas, It has appeared that these changes are inconsistent with the original plan, and detrimental to the interests of the medical profession in America, and of the International Medical Congress; therefore, be it

"Resolved, That we, the undersigned, consider that our duty to the profession and to ourselves requires us to decline to hold any office whatsoever in connection with the said Congress as now proposed to be organized."

This is signed by twenty-nine gentlemen, among them:

D. Hayes Agnew, Roberts Bartholow, John H. Brinton, J. M. Da Costa, Louis A. Duhring, William Goodell, Samuel W. Gross, I. Minis Hays, S. Weir Mitchell, William Osler, John H. Packard, Theophilus Parvin, William Pepper, Alfred Stillé, James Tyson, Horatio C. Wood.

Furthermore we learn that a similar action has been had by some of the profession in Boston. The resolution has not yet reached us.

All in all, the differences are about as marked as they can be and the relations are most strained. This forebodes evil for the success of our International Medical Congress.

Toxic Enteritis Due to Corrosive Sublimate.—E. Fraenkel reports 14 cases of toxic enteritis that arose from corrosive sublimate treatment at the Hamburger Allgemeine Krankenhaus. The conclusions of his article, which is contained in Virchow's Archiv, are:

1. That corrosive sublimate is the most powerful of the antiseptics that can be practically employed; accidental wound-diseases rarely occur.

2. The employment of the sublimate, however, is dangerous, in this: that excessive external use is followed by diphtheritic inflammation of the large intestine, in a few cases even of the small intestine. This is manifested by tenesmus, colic, bloody diarrhea. Definite alterations of the kidneys have not been observed.

3. The toxic enteritis referred to develops especially in patients that are run down, or excessively obese, having a poor heart action; especially if large surfaces are brought in contact with the sublimate-dressings, or surfaces of ready absorption, such as the peritoneum, the uterine cavity. Individual idiosyncrasies also may favor intoxication.

4. For these reasons corrosive sublimate is to be cautiously employed and in the weakest solutions still possessing antiseptic virtues. The copious irrigation of wounds, and in especial of the puerperal uterus, with sublimate solutions is a dangerous practice.

Spleen Auscultation in Intermittent Fever.—Maissurianz in the St. Petersburger Med.Wochenschr.reports that he couldhear in a malaria patient an intermittent soft blowing sound, synchronous with the pulse, at the tip of the tenth rib, left side. The spleen was much enlarged. The sound is considered similar in character and origin to the auscultatory phenomenon in the gravid uterus and in the enlarged thyroid gland in morbus Basedowii. This peculiar spleen pulsation had been previously mentioned by Winkel and was by him found in cukemia.

Veratria in the Treatment of Cholera Nostras.

H. Schulz in the Deutsche Med. Wochenschr. refers to some of the older recommendations of veratria in cholera nostras. The indubitable good effects may be due either, (1) to a direct germicidal influence of this powerful alkaloid; or (2) to an alterative influence upon the substratum of the infection, i. e., the intestinal walls. The former possibility must be rejected. Schulz and Grawitz experimented on Finkler-Prior and on Koch cultures and found that veratria in great concentration even did not affect the bacilli. On the other hand, it is a toxicological fact that veratria brings about a congestion of the intestines; under the influence of this increased nutrition the power of resistance to the virus is heightened. The veratria may be given as the pure alkaloid or as a salt of the alkaloid or in tincture.

Missouri State Board of Health.—We are much gratified to be able to announce that Dr. George Homan, of St. Louis, was made Secretary of the Missouri State Board of Health at its organization, July 2. In advocating his claims for the place we set forth why his selection would be wise and fit. The other officers elected were:

President, Major William Gentry; treasurer, Mr. James B. Parker; Vice-President, Dr. A. Merrel.

Removal.

We take pleasure in informing our readers that the publishers of the Weekly Medical Review have secured more commodious and convenient quarters for the transaction of theirbusiness at 914 Locust Street, St. Louis, Mo. We cordially invite our patrons to visit our new home.

The Alleged Incompatibility of Quinine and Iodide of Potassium.—Sometime ago Dr. Rabuteau of Paris called the attention of the Société de Biologie to the incompatibility of quinine and the iodide of potassium. This announcement went through the medical press and was also published in this journal. Rabuteau stated that the combination of the two remedies often gave rise to intestinal trouble, pain in the stomach, colic, general malaise, weak pulse, etc. These symptoms he attributed to the mutual decomposition of the two salts and the action of the iodine on the mucous membrane of the stomach. This opinion is at variance with the clinical experience of Dr. Emmanuele who, in "Il Morgagni," of May 9,

1885, publishes a protest against Rabuteau's conclusion. Emmanuele is the originator of the combined quinine and iodide of potassium treatment, and found it to yield excellent results in the proportion of six grains of the latter to fifteen grains of the former. Rabuteau in his communication forgot to mention the proportionate doses which he alleges produce toxic effects.

Emmanuele claims that the combination is always tolerated and is given with the happiest results in severe cases of malarial fever, especially those of a congestive (pernicious) type in which the iodide increases the effect of the antiperiodic.

Spontaneous Fatal Diabetes Mellitus of Animals as Compared with that of Man. —The above is the title of a series of articles published in "Il Morgagni" by Dr. Pasquele, of Naples. He arrives at the following conclusions:

1. In the dog diabetes mellitus may develop spontaneously and gradually increase in intensity until it proves fatal.

2. The etiology and the clinical symptoms of diabetes mellitus in the dog are similar to those observed in man.

3. The anatomico-histological changes in diabetes mellitus in the dog do not differ materially from those found in diabetes mellitus of man. If differences do exist they relate only to the intensity and course of the several lesions.

4. The study of the disease in the dog gives us a better understanding of certain organic pathological changes observed in diabetes of man.

5. All these changes are due to mellithemia.

6. The genesis of the intense mellithemia which is the essence of the whole disease is not yet well understood. When the physiological foundation of the hyperglycemia will be known then only can we speak of a complete study of diabetes mellitus.

Cholecystotomy v. Cholecystectomy.—Mr. Lawson Tait writes the following pertinent remarks to the British Medical Journal couched in his usual vigorous style:

"I have just had my attention drawn by my friend, Professor Boddaert van Custen, to a recent discussion upon this subject at the Belgian Académie de Médicine, where it was argued against the operation of cholecystotomy, and in favor of that for removing the gall-bladder, on the ground that the recurrence of stones in the gall-bladder would be likely, by leaving the organ.

This is either a merely a priori objection, or it is based upon actual experience. If it is a mere a priori statement, it may be dismissed at once without discussion, because I desire to place it on record that not in any one of my cases is there, so far, the slightest evidence of a tendency to recurrence of the disease. The earliest of these cases dates from August, 1878. Fifteen of my cases are still alive, and I do not know, with the exception of my colleague, Dr. Savage, that there has been any other successful trial of the operation. I desire also to point out that, even if the gall-stones were to form again, their subsequent removal, by a small incision through the old cicatrix, would be the easiest possible proceeding, as, in my operation, very careful union is made between the gall-bladder aud the abdominal walls. The operation for the removal of the gall-bladder seems to me a radically absurd one, and wholly unnecessary. In the first place, it is terribly fatal, because, so far as we can learn the statistics of it, in the hands of its originator at least fifty per cent of the cases have died, whilst all my fifteen cases of cholecystotomy have recovered, and, with one exception, have been cured. The formation of gall-stones is not due to the existence of the gall-bladder, because we find gall-stones in the substance of the liver and in the biliary duct. It is due to some morbid condition of the secretion of the liver, by which there seems to be maintained in the bile a superabundance of cholesterin, or of some substance or substances which deposit crystals of

cholesterin. Removal of the gall-bladder would not in any way contribute to an alteration of this condition, and the mere existence of the gall-bladder is satisfactory evidence that it has some important function to fulfill, though what that function is yet remains to be discovered. Removal of the gall-bladder in the abnormal condition of the bile which induces the formation of gall-stones might have a really deleterious influence, for all that we can tell."

Resection of Ribs for Pyopericardium.—The Wiener Medicin. Wochenschr. reports (Cin. Lanc. and Clin.): "At a late meeting of the Verein Deutscher Aerzte in Prague Prof. Gussenbauer exhibited a boy 13 years old, in whom he had evacuated by operation the fluid of a pyopericarditis accompanying an acute osteomyelitis. The operation was successful and the boy entirely recovered.

The osteomyelitis resulted from a fall upon the right shoulder, which was followed by local pains and high fever, with great swelling of the shoulder and adjacent parts. A diagnosis of osteomyelitis was shortly made, and on May 3, fourteen days after the accident, the boy was operated upon.

An incision at the infraspinous fossa was made' which was followed by an escape of pus, and the bone presented a grayish appearanee. The operation was done with antiseptic precautions. The temperature did not fall as expected, but rose without any apparent cause.

On May 20, fluid was discovered in the left thorax, the heart was not noticeably displaced and the intercostal spaces not obliterated. At first a left-sided pleurisy was suspected, and an exploratorv puncture showed a puriform exudation. The patient at last becoming cyanotic, an operation was decided upon, and five ribs were resected. It was then noticed that the intra thoracic fascia was not thickened, and further examination showed the effusion to be pericardial. The pericardium was then fixed to the edges of the wound to prevent the escape of the fluid, on its evacuation into the pleural cavity. During the operation the heart could be seen and felt palpitating.

The pericardium, after the withdrawal of the purulent contents, was washed with a thymol solution.

The following day the temperature fell at once and complete restoration soon followed.

The Use of Strychnine in Nervous Diseases.—At the late meeting of the American Neurological Association Dr. Gray read a paper with this title, which the New York Medical Journal reports as follows: His attention had been called to the subject by a paper by Dr. Jewell, in which large doses of strychnine had been advocated. Dr. Gray employed the drug in many cases of myelitis, but in only two really acute cases, having desisted from its use in this class of cases because of the unfavorable symptoms which it caused. Also in one case of transverse myeletis, one-thirtieth-grain doses having been given for about a month without any toxic symptoms,the dose was increased to one twenty-fifth of a grain, and within three or four days, without warning, alarming symptons of strychnine poison developed. In certain chronic cases the drug had produced good effects; but Dr. Gray would begin with one-fiftieth-grain doses, and would cautiously increase the dose, not carrying it above one-twentieth of a grain. In five cases of progressive muscular atrophy the effect of the drug had been simply to produce stimulation without apparent real improvement. He had never felt himself warranted in giving the large doses administered by Dr. Jewell (one-eighth or one tenth-grain doses); he would not go beyond the first toxic symptoms.

Dr. C. L. Dana had had experience with large doses of strychnine in certain functional forms of nervous disease. One patient, who had become unable to attend to business, because of mental and physical depression, began taking one-fifteenth-grain doses, and increased the amount so that he took, in divided doses, as much as a grain a day. Under this treatment he felt better than under any other, and doses not quite so large had been

of benefit in other cases. He had not seen any explosive or cumulative effects of the drug.

Dr. Seguin had heard the same ideas regarding the use of strychnine advanced many years ago by Brown-Séquard. Dr. Seguin had given the drug in increasing doses in a number of cases of functional disease of the nervous system with benefit. With reference to Dr. Jewell's practice, he thought it was pretty risky because of the uncertainty of diagnosis in many cases. It had occurred to him that perhaps one reason why Dr. Jewell's patients had borne such large doses without evil results was that they had no central motor apparatus left to respond to its influence. Dr. Seguin would recommend the administration of strychnine hypodermically, thus avoiding the explosive effects which might come from a collection of pills in the alimentary tract.

Recent Experiments on the Severed Heads of Criminals.—The Paris correspondent of the Lancet (Medical and Surgical Reporter) says that the question has again been mooted as to whether those who have been decapitated suffer; and after additional experiments on the head of Gamahut, who was guillotined on April 24, for the murder of a widow lady in Paris, coupled with those related by Claude Barnard, the presumption is that they do; for under the influence of transfused blood, the blanched features recovered almost their normal expression, the eyelids were slightly open, and the lips quivered for a few seconds, as if to express some perception communicated from the brain. The conclusion then, is that so long as the brain contains any blood, the head of the decapitated person, which falls into a receptacle prepared for the purpose, is capable of seeing, of hearing, and of knowing that it is separated from the body. This view, however, was repudiated by Professor Vulpian at the last meeting of the Academy of Medicine, on the following grounds: A strong blow applied to the head, or a less severe one to the stomach, would cause instantaneous syncope; that is to say, consciousness would for the moment be entirely abolished. So it would be in the case of the severed head, but of course without any possibility of recovery; the weight of the guillotine falling upon the neck would produce the same result. Moreover, syncope would be occasioned by the sudden division of the carotid arteries, and the consequent emptying of the arterial system of the brain. Therefore, at the very moment that the brain ceases to receive the vivifying fluid from the heart,it loses all power of excito-motility, as well as all power of sensation; all this transpires as quickly as thought, and its duration may be compared to a flash of lightning. It happened opportunely that a dog that was undergoing some experi ments in Prof. Vulpian's laboratory was suddenly seized with a hemorrhage. Advantage was taken of this circumstance to immediately expose the brain and submit the latter to faradization. Scarcely half a minute had elapsed between the arrest of the circulation and the galvanic irritation. It was impossible to obtain any movement of the legs. The effects of the electricity produced in the muscles of the head and nose were not, according to Prof. Vulpian,due to physiological transmission effected by the brain, but to the neighborhood of the source of irritation; the brain having lost all power of excito-motility, would in this case act as a mere sponge; and if such a condition was found to exist for only half a minute after the arrest of the circulation, the interpretation put on the effects said to be produced on severed heads by other experimenters must certainly be considered erroneous.

Sanitation by Fire.—Colonel J. M. Keating (The Sanitarian, N. Y. Medical Record) read a paper before the American Public Health Association, entitled "The Ultimate of Sanitation by Fire." From the testimony adduced in his paper, he concludes that the cremation of excreta and all household wastes and street wastes would: 1, Preclude the possibility of the return of such wastes in any deleterious form, as is the case now univer-

sally; 2, it would save to all cities two-thirds their present water supply, and thus increase the quantity for personal sanitation; 3, it would put a stop beyond all question to soil saturation and sewer-gas; 4, it would reduce scavenging to the minimum of expense, and save much of the cost of hauling and of great sewerage works, like those of Boston and London; 5, it would put a stop to all the nuisance complained of from defective plumbing; 6, it would prevent the silting up of harbors with excretal matter, and their being choked with silt; 7, it would prevent the pollution of rivers, and so prevent the wholesale destruction, as is now the case, of fish, the poor man's food-crop; 8, equally applicable to hamlets, villages, towns, and cities, it would put a stop to the privy and cesspool system, and thus prevent the saturation of soils, which frequently drain into the water-courses that are the sources of supply for great cities; 9, it would solve the problems that now vex sanitarians, from house connections to the overflow through which sewage finds its way into rivers and harbors; 10,it makes a finalty of all the wastes of cities,of every kind,character, and description, the result being, according to Shaw's method, an ash of great value to farmers, and clinkers that have a special commercial value for builders.

CONTRIBUTIONS.

SURGICAL TREATMEFT OF INFANTS.

BY DE FOREST WILLARD, M. D.,

Lecturer on Orthopedic Surgery, University of Pensylvania, Surgeon to the Presbyterian Hospital, etc.

Read by Invitation before the Philadelphia Obstetrica Society, June 4, 1885.

Your committee having invited me to speak to you to-night upon the Surgical Treatment of Infants, I purpose to confine my remarks chiefly to personal experiences in the means of relieving the principal surgical difficulties which are met with during the first two years of life. If the subject shall occasionally lead me to mention older children, it will be because the line between infancy and childhood is not a marked and well defined one.

As you are all active practitioners also,it will be unnecessary for me to dwell upon detail,and I shall only touch upon practical points in treatment. The surgery of childhood as compared with that of adult life, is, aside even from congenital defects, sufficiently marked and distinctive to entitle it to separate consideration.

First of all, must the children's surgeon acquaint himself with the anatomy of the child. This is rarely done, as the ordinary adult dissections during a college course give little idea of the size and position of the individual elements as seen in the infant. In consequence of ignorance upon this practical point, many grievous failures have occurred. After unusually large opportunities for the study of both normal and abnormal tissues in the diminutive frame, I am still frequently surprised to note the exceeding smallness of different organs and canals.

Another essential element in the surgeon is tact in the management of the little ones, especially when dealing with those between the ages of two and ten. In hospital cases but little history is attainable and much depends upon quick perception. Naturally fearful of pain the patient's mind must be diverted and engaged or great difficulties in diagnosis will often occur from the fright and struggling. The operator not in sympathy with children, can never secure their confidence. Much will often be gained by quiet observation. It is not a month since my opinion, which at the first few moments of the consultation, had been favorable to tracheotomy, was changed by five minutes close watching, and the result proved the correctness of the procedure. To the person, however, who will carefully study individuality as well as disease, no department of medicine offers so pleasant a return for his labors. My personal experience with children has, perhaps, made me more hopeful in regard to the power of such individuals to endure pain, shock and disease, than would be indicated by the expressions of other authors, but to me there is no domain of surgery so attractive and gratifying as the treatmeut of children below the age of puberty. Their natural condition is that of hopefulness and as soon as the depressing influence of shock, pain or fear is removed, the normal resiliency of mind and body asserts itself with such rapidity that the results are often surprising.

Again, a child has only inherited taints of constitution to contend against; his viscera are ordinarily in a healthy condition; an adult has not only hereditary, but all the acquired vices occasioned by misuse or abuse

of any organ or sets of organs, a circumstance which often turns the scale in the struggle between life and death. Take, for example, the single instance of the outraging or tissues by either the moderate or the excessive use of alcohol, and every surgeon will testify that even slight wounds may, in such an individual, quickly develop a fatal attack of mania-a-potu.

Tetanus is not more frequent in infants than in adults, notwithstanding the tendency of the former to nerve excitability.

In regard to anesthetics, my experience is that great benefit is obtained by the use of ether when pain can thereby be prevented. In the first weeks of existence I admit that a feeble vitality would contra-indicate its use, although I have successfully administered it to a three-day's old infant. After the first or second month I see no reason why we should needlessly inflict pain upon an infant simply because we can control it by brute force. In the examination of fractures great suffering is often inflicted by careless and frequent manipulation, and, unless the diagnosis is easy and positive, unconsciousness should be produced. No case of bone injury should ever be passed by undiagnosed, when ether will solve the question.

In the opening of abscesses, the "primary quieting influence" of ether is so readily obtained that it should be brought into use whenever practicable, as keenness of pain can thereby be avoided.

Fear plays an important part and may depress the child's system even more than pain, hence great caution should be observed that all knowledge of any operative procedure should be guarded against. When the day for action arrives, let the surgeon quietly and gently state to the little one, if it has arrived at years of reason, just what it is proposed to do, at the same time assuring him that no pain will be experienced, and if such words be followed by firm, speedy and jndicious management, much agitation and fear will be avoided.

All preparations should be made out of sight and hearing of the patient and instruments need never be seen by him, except when a strong impression is intended to be made upon the mind of a masturbating boy, requiring circumcision, in which case ether may also be omitted.

One word in regard to the method of anesthetization. It is but natural that a child should be distrustful of any attempt to deprive him of consciousness, a fear which is greatly increased by the injudicious and greatly to be condemned habit of many parents, who systematically threaten their offspring with the expression, "the doctor will come and cut your head off." A few kind words will often quiet the agitation, and simple directions as to the method of breathing, will save many minutes of struggling resistance. With very young children,the first smell of ether may be masked by permitting them to see cologne poured upon the towel, after which ether may be quietly added and they will feel that it is a perfume that they are breathing. This device has frequently served me a good purpose. I always allow a good mixture of fresh air for the first moment, but when the child actually begins to cry, then quick action answers best. The towel should now be well saturated and held firmly over nose and mouth until two or three strong screams and inhalations will yield a full primary impression which can be gradually followed up to complete anesthesia with safety.

Should any symptoms of ether narcosis occur, it is so easy to depress the head of a child or to perform artificial respiration by acting upon the ribs, that serious accidents are infrequent. Subsequent vomiting is very common, but is not persistent and is easily quieted by a small hypodermic of morphia, a procedure which ordinarily brings quiet sleep to the patient. If the child is feeble, I always allow milk up to within two or three hours of the operation, and then administer wine or whiskey in water immediately before giving the anesthetic. Milk with lime water and whiskey is usually retained within ten minutes nfter the first vomiting on rousing. In tedious excisions not only should preliminary precautions be taken to secure against prostration by shock, but hot water bags should be ready for use, which with hypodermics of brandy, may succeed in tiding over a temporary depression which would otherwise end in death. When the loss of blood has been great, especially in acute surgery, important assistance may be gained by transfusion, either of blood or of a warm saline solution.

Under the head of arrest of hemorrhage, I would strongly advocate the use of animal ligatures, since the pain often incident upon the removal of threads, greatly disturbs the needed quietude of wound and mind.

Thorough asepsis and antisepsis are equally valuable, since we not only secure the admirable results that are attainable by their use, but are also enabled to disturb the child with far less frequency. I am now treating a girl with a railroad crush of the leg which would thoroughly have justified amputation, yet

which under corrosive sublimate dressings has not been touched but six times in as many weeks even though extensive sloughing has occurred. Save, upon one occasion, at the height of the process of tissue death, the applications have been taken away perfectly sweet, and the child has the promise of a reasonably good limb. In my septic days, I certainly was never able to carry a patient through such a process and keep the temperature as has been done in this case below 99.5° all the time, and usually slightly above 96°. With infrequent dressings, the irritation of the child is but slight, and, if pain is also absent, contentment is the rule, under proper nursing.

I cannot too strongly emphasize the importance of this latter condition. A kind, quiet, gentle nurse, is one of the most valuable assistants in the real progress of the case especially during the first week following operation . Such care cannot be delegated to untrained and careless people, hence it is absolutely necessary that children should be in separate hospitals, or in separate wards,under the best of care-takers. Even in private practice, the mother is rarely the best nurse for a child past two or three years of age, and a skilled attendant answers best. In hospital practice, I have often been surprised to see how contented and patient the majority of children of even three years of age will become, if the mother maintains a judicious absence and the nurse is efficient and kind.

Another point which I wish most emphatically to emphasize to-night is the fact that congenital defects are most inexcusably and persistently neglectod by even good practitioners either under the mistaken opinion that nothing can be done, or that a later period will be early enough. The consequence is that many unfortunates become helpless and hopeless cripples by their physician's advice, since passing out of his sight and mind, the neglect engendered by his direction "wait," is fostered by parents ever ready to postpone a dreaded day.

Turning to some of the special surgical diseases of infants I would say that it is my intention to simply touch upon a few points of treatment without regard to definite arrangement or order, since to consider almost any one of the conditions in full would require an entire evening's discussion.

In a new-born child, the first most probable trouble requiring surgical relief will be imperforate anus or rectum. Such a condition is not improbable when we remember that the intestine is formed as a closed tube. If the malformation be simply one of occlusion of the anus by a membrane, it would seem to be the easiest of procedures for any practitioner to make an opening, yet I have seen children permitted to die with the entire ischio-rectal fossa and perineum bulging with retained feces, when a simple puncture through a membrane, closing an otherwise normal anus, would have given immediate relief. This timidity perhaps may be explained by the fact that occluded anus and imperforate anus are confounded with imperforate rectum and the case is given up as hopeless. In imperforate anus, the operation is still a simple one, since a crucial incision, together with stitching of the mucous membrane to the skin and subsequent dilation with the finger or probe, is all that is required.

When the anus is normal and patulous, but the rectum is occluded by a membrane, or is actually absent, then a much more serious condition presents itself, the difficulty increasing in proportion to the extent of the deficiency. Should no meconium be passed within the first twenty-four hours, a careful search should be instituted. The little finger or a catheter passed into the anus will detect the obstruction,or if the anus be absent,the vagina, if present, may be explored for the abnormal fistulæ. As soon as the presence of feces can be discovered in the fossa, a careful dissection should be made, keeping well backward, so as to avoid the vagina, or the urethra and bladder. A catheter should always mark the position of the urethra. There is but little danger even in deep incisions, if the region of the coccyx and sacrum be followed. The gut found, should be drawn down as far as possible and secured, a channel being maintained through the lower rectal region if necessary, by the finger or by bougies, the latter of which should not however be retained constantly in position. There is much less danger from subsequent hemorrhage, if the external incision be free, and no fear need be entertained about the ultimate retention of feces, as, if the child escapes peritonitis and other inflammations, good control of the bowel is always secured; in fact the chief subsequent danger lies in the formation of stricture. When the length of the bowel will not permit it to reach to the site of the anus,the new opening may be made nearer to the sacrum- Should no trace of the rectum be found within two inches of the anus, it is unsafe to further explore a region where peritoneum would be liable to injury: either left inguinal or left lumbar colotomy should be performed. The right groin is to be selected if there are evidences of absence of sigmoid flexure. The left inguinal posi-

tion gives a better subsequent opportunity of passing a bougie downwards into the rectum and thus establishing a proper anus. If the colon is full, it will not be difficult to find. In cases of doubt, its distension by air or water through a hypodermic needle, would determine, its termination. Abnormal openings into the vagina, bladder or urethra, rarely require early operation, but in non-retention of feces at a later age, Rizzoli's plan of procedure is a good one.

Later in childhood, the surgeon is often compelled to treat another condition of the rectum, namely, prolapse. This, if excessive and non-yielding to replacement, astringent applications, hot water bathings and general constitutional measures, must be cured by the production of linear eschars by nitric acid.

The genito-urinary organs may also require attention immediately after birth. A simple occluded urethra is easily relieved by the careful introduction of a sound or catheter. Epi- and hypo-spadias and extrophy of the bladder, should not be allowed to go on to adult life without relief. As soon as the child has passed its dentition period, a plastic operation should be attempted for relief, since the mental and moral effect of such a deformity has often a marked influence upon the lives of the unfortunates. Adhesion of the vulva or nymphæ should not be overlooked, since not only does the nervous system suffer, but the parts may be improperly developed. Separation can almost always be accomplished by the finger or by a probe. An absolutely imperforate hymen should never be allowed to exist if discovered, since if permitted to impede the menstrual flow at a later period, serious and even fatal results may follow no division, if the uterus and Fallopian tubes have become dilated by the imprisoned secretion. Imperforate vagina should receive at least careful diagnostic attention to detect the presence of a uterus, and if not absent, fuller development will be secured,if the passage can be opened during the first few years of life. With a catheter in the urethra and a finger in the rectum a careful operator can explore safely. I have met several cases in which the penis was preternaturally short and illy formed, the body of the organ during flaccidity being almostentirely concealed in the fatty tissues of the pubes. In such instances, I have removed the prepuce during the first three months of life and have cut away all restricting bands of skin and connective tissue, sometimes even drawing beneath the penis an extra flap of skin when the corpus spongiosum has been short and dwarfed. By such means, the fullest amount of growth is gencouraed.

Adherent and contracted prepuce or phymosis has been the subject of much discussion in regard to its casual influence upon certain manifestations. My views upon this subject have already been published, (Philadelphia Medical Times, June 30, 1883.) and after two years additional experience, during which time, I have been brought daily in contact with this class of cases, I can reiterate what I then stated, namely that while more or less adhesion is an almost constant and normal condition, yet that when urinary, choreic, paretic or any other nervous symptoms develop, a careful investigation should never be ommitted, since a direct relation will in a certain number of cases be clearly evidenced, and removal of the cause will speedily cure the manifestation. The fact that even circumscision does not relieve the symptoms is undoubtedly true in many instances, and I have never claimed that preputial adhesion and narrowing was anything more than one of several factors which should be carefully scrutinized. I have only urged that its influence should not be overlooked, and when so simple an operation as strpping the prepuce from the glans by the thumbs or possibly by the use of a probe, is all sufficient, there can certainly be no argument against removing this one factor. My opinion in regard tothe feasibility of drawing back the prepuce in young children, even when the opening seems scarcely pin-hole in diameter, has been greatly strengthened, and circumcision is only necessary when the simpler method described, fails to secure a prepuce freely movable over a normal glans. Dilatation even is but rarely required, a few moments of continuous pressure soon revealing the mucous layer, adherent perhaps just about the meatus, which when loosened, permits the head to pass through the opening and the corona is freed with the thumbs. Should temporary para-phymosis occur, two probes or a hair pin slipped beneath the constriction will easily permit replacement.

Congenital hydrocele rarely requires much surgical interferrence beyond an evaporating lotion of muriate of ammonia or alcohol as a few weeks will often close the canal, if hernia does not co-exist, a fact which can be determined by non-translucency and capability of reduction. Should the connection with the peritoneum fail to close, puncture with the application of a truss will usually complete the cure. A hydrocele with closed canal is better treated by tapping and injection than by seton. The diagnosis between encysted hydrocele of the cord, hernia and undescended testicle is sometimes difficult,

but if the surgeon remembers that the former is simply a cyst of some unobliterated portion of the peritoneal coat of the cord, that its rounded shape can be detected if it is pulled well down into the scrotum,that it is usually translucent, that the impulse is not as decided as in a case of hernia, that it returns to the abdomen only by being pressed upward and not with a slip and gargle, he will rarely be led astray. A hernia may coexist with either of the above mentioned conditions, but if non-adherent careful isolation will settle the diagnosis. Should the hernia become strangulated or the nondescended testicle become inflamed and infiltrated, the most careful examination will be necessary. In retained testicle, its absence from the scrotum will be the first point in arriving at a decision, but even in such a condition, the organ might be within the abdomen and encysted hydrocele present, or the testis might, as has recently fallen under my notice, slip into the tissue of the perineum and be exceedingly difficult to discover. In the case just mentioned, it sometimes requires numerous manipulations to cause the missing organ to return to the pouch. Should hernia and retained testicle both exist, a double purpose can be gained by drawing the latter down, and pushing the former up and then applying a truss. The sucessful retention of the organ within the scrotum is a matter of great difficulty, and removal is scarcely justifiable in young persons unless pain or inflammation ensues. Extirpation, if required in later youth, will probably not interfere with the pro-creative power of the individual, since one gland will supply all requisite material, and the affected one is practically useless from atrophy, even if it is not devoid of tubular structure. Traction is of little service as manipulation tends to increase the sensitiveness of the organ. In prognosis it should be remembered that cryptorchism exists in nearly ten per cent of males at birth and that descent may occur within the next week.

Simple umbilical and inguinal hernia should receive early attention, as, contrary to the rule in adults, a cure can often be effected during the first year of life by the persistent use of truss. In young infants, I prefer the hard rubber variety as more cleanly. The instrument should be applied during the first few years of life and continued for one or more years. The treatment of strangulated hernia does not differ from that of the adult, but in obstruction of the bowels, intussusception is so commonly the cause of the blockade, that unless violent peritonitis is present, laparotomy with careful search for the invagination, offers the best hope of relief and I am glad to say is rapidly growing in favor.

Meningocele, encephalocele and spina bifida, are complaints that will early require the surgeon's attention or at least his expression of opinion and his prognosis. If attached by means of a narrow pedicle, constriction with an elastic band is feasible, but unfortunately this pedicle is but seldom found. Injection of iodine, following tapping is rarely successful, yet is worthy of trial in so hopeless a task. In a large hydrorachis of the lumbar region, lately under my care, which resisted pressure, tapping, injection and constriction, I was strongly inclined to excise the thin sac and attempt a plastic operation by drawing toward the median line, two flaps of skin from the lumbar region, leaving the vacancies to granulate. Soon after a consultation, in which I was dissuaded from my attempt, the tumor ruptured spontaneously and death occured in two days, although frequent tappings had never produced any nervous symptoms. I had then never seen a record of such a plan of procedure, but only last week I noticed in the Journal of the American Medical Association, Vol. IV, No, 466, that Mr. Robson had performed this operation with successful results in two out of four cases. Strict antisepsis was enforced.

Cephalhematomata are usually easily distinguished from encephalocele or meningocele and also from the simple tumor, caput succedaneum, the latter being exterior to the periosteum and more doughy. The blood in a cephalhematoma is always confined between the pericranium and the bone substance and increases until the second or third day. The hardened ridge around the border of the tumor may give the sensation of an opening in the bone, but the orifice in meningocele is rarely as large as the base of the swelling mentioned. The peculiar crackling feeling upon pressure at a later period is due to the new bone deposits beneath the periosteum. Absorption so generally takes place in three or four weeks that aspiration or incision is unwise, even though antisepsis be thoroughly practiced, unless in exceptional cases when suppuration is certainly found. Lotions have a good influence at least upon the brain of the mother.

Hare-lip will early require the careful study of the surgeon, situated as it is upon the portion of the body that is most regarded in the cosmetic point of view. Its proper relief, therefore, becomes not only a matter of surgical skill, but of surgico-artistic skill. The

time for the performance of the operation is a point upon which there is a wide diversity of opinion. My rule is to relieve the deformity within three or four days, if it interferes with the proper nursing of the child. Practically I must confess, however, that by the end of the operation the milk has left the mother's breast, unless there is some other baby to maintain the flow. My preference is to wait about three months until a full, vigorous activity of growth and cell action is at work, and before the process of dentition has commenced. This period is selected, not only for the reason mentioned, but also because the child cannot use its hands as freely as at a later period of infancy, thus avoiding risk of injury. In one patient, a year old, diphtheria appeared the day following operation, and in his convulsions all the pins were twice torn entirely from their fastenings, and the fresh wound became implicated. In spite of such complication an excellent result was obtained, by holding the parts together for days with adhesive plaster, cut in the form of a triangle, sufficiently large to cover at its base the area from in front of the ear to the corner of the hyoid bone, with its apex prolonged at the width of the upper lip, to meet a similarly shaped piece from the opposite side. These sections were united by a small elastic ring, which maintained a constant pull upon the tissues of the cheek,and controlled spasmodic muscular action. In fractious children I have now abolished pins, and have substituted catgut sutures for the mucous surfaces which, if of small size and tied in three knots, will remain in position until union occurs. For the skin edges I use carbolized interupted silk sutures, my reason for stitching the surfaces separately being that there is less linear depression of the cicatrix and less constriction of tissues is thereby exercised than by pins and figure of eight, while if each set penetrate half way through the lip antero-posteriorly, the sphincter is thoroughly controlled. One of the stitches should pierce the coronary arteries. To prevent any pouching of the flaps or separation of the deeper parts by boxing, horse-hair drainage for a few hours answers the best purpose. Additional control of muscles should be given by adhesive plaster, prepared as above indicated, or by strips which should not only be applied transversely, but, in order to prevent strain, should commence upon the neck on either side, in front of the sterno-mastoid, near the cornu of the hyoid, and run thence just above the angle of the mouth across the opposite malar to the front of the ear. If these are all put in position while the surgeon pinches the cheeks well together, he will find upon releasing his grasp that the minimum of tension is exerted upon the stitches. A still better plan is to have the nurse regulate this muscular action for the first few days, by pressure whenever thechild cries or eats. Only by securing union by the first intention, can we hope to have a narrow cicatrix, hence I do not allow the child to suck as is the practice with some surgeons, but prefer spoon feeding as producing less disturbance. For the same reason, anodynes should be employed to control pain and keep the little one for a few days in a quiescent state. The child should be in the best possible condition physically as quick union is desirable. To avoid the marginal depression so commonly seen and which is inevitable if the simple inserted V-incision is used, I never sacrifice any portion of the paring, but commencing the incision at the apex of the cleft it is stopped just before it reaches the border of the lip, thus leaving a base of supply to nourish the flap which remains on either side. These two flaps when the parts are brought together project downward and form a fleshy prominence, but if stitched nicely together, will unite and from subsequent absorption during the next year will give a slight projection. Even should this be larger than desirable it is far preferable to the ugly notch which can not be corrected, since a simple scissor cut will remove all redundancy and give a nearly normal lip. The same rule in regard to utilization of tissue holds good in complicated cases of hare-lip when it becomes necessarry to save as much of the alveolus as possible. Broken or cut, it can often be worked to advantage in bridging the chasm or supporting a fallen nasal septum.

If cleft palate co-exists with hare-lip, an additional necessity for early treatment is present, since the closure of the lip will tend greatly to lessen the gap in the hard palate. Dentists realize more fully than surgeons how slight is the pressure required to act upon a tooth or upon the alveolar process, but a moment's reflection will convince any practical man that such narrowing can be accomplished even if he has never witnessed it. In these instances, as in hare-lip and many other deformities, neglect is often as much the fault of the physician as of the family. An early operation upon the lip, strong pressure upon the maxillary bones, followed by the use of a Hainsby's compressor, will in a few years, bring the cleft so closely together that a single operation will unite the edges.

These are the considerations which influence me in advising that while the lip should

be closed early, the cleft palate operation be deferred until the plan has been tested. Few children from five to ten are tractable enough to endure the pain of a staphylorrhaphy without ether, which is desirable, and I see no particular harm in delaying the procedure until the latter period, save that the unused or malused muscles will require a longer period of education after closure. In a recent staphylorrhaphy upon a boy of sixteen, the letters of the alphabet could, however, all be correctly pronounced in three weeks except the k and hard c sounds. If a good velum and uvula can't be secured by union, the hard palate can be admirably assisted by any obturator. Only last week by preliminary touching and the use of cocaine I was able in a child of five years to make the parings without pain and thus avoided anesthesia until the hemorrhage had ceased; ether being employed for stitching only.

Tongue-tie is a condition that exists more frequently in imagination than in reality, yet the operation for its relief need be no more than the most trifling nick of the frenum, the finger completing the work. If the organ can be protruded to the red border of the lip no operation is necessary.

Club-foot is a deformity which is frequently neglected, not alone from the apathy of parents, but as is shown by the cases which come under my notice, far more frequently from the incomprehensible advice of the family physician who has counseled that nothing shall be done for the present. Weeks slip away into months and months into years, during which time one set of muscular fibres and one set of ligaments have beeome elongated, while the opposite ones, are atrophied, condensed and shortened. Bones too have become distorted and wedge-shaped and the difficulties have of course increased four-fold with each advancing year. I have never been able to comprehend any reason why delay should be countenanced a single day after birth since manipulation and subsequent fixation can easily be accomplished at the first dressing of the child. I know of no words sufficiently strong to characterize such neglect of duty as is seen in numerous instances. Twice in the last three days, have I had this matter brought before me by parents, who have come to the office and who have given as the reason of their inaction that the physician had directed them to wait. Even before the age of walking great condensation of tissue will take place and increase of deformity will occur from simple pressure of clothing, but as soon as the weight of the body is brought to bear upon these misshapen members, the change will be rapid. The secret of cure of club-foot lies not in operation but in careful attention to all the means of relief. At the first hour of birth, as I have said, manipulation should be commenced by bringing the foot from the abnormal into a normal position or as near as it is possible and confining it there by wood, felt, binder's board or leather splints rightly adapted. At the next visit, leather or gutta-percha or preferably printer's blanket cinctures, should be laced upon the foot and leg and connected by an elastic strap. The two ply printer's blanket with its rubber face does not slip even when applied with only moderate tightness thus being superior to other materials. Hook eyelets are easily inserted by any shoemaker and the lacing need not impede circulation. Manipulation can be practiced twenty times a day without taking off the apparatus while removal at night gives opportunities for massage, frictions, etc. If co-operation of parents is wanting plaster of Paris can be employed with excellent advantage for fixation, a gain being effected with each months renewal of the dressing. Leather, felt, sheet-lead and silicate of soda are of use, but do not permit removal for manipulation and are therefore inferior to the bands already mentioned. These bands which permit of constant elastic traction day and night, are very inexpensive if remnants are bought. Their use puts the successful early treatment of any cases of talipes in the hands of the ordinary practitioner for the first few months of life. In cases which are of a severe type, a subsequent operation is usually necessary, but the manipulation which has been practiced up to the time for tenotomy, stretches condensed tissues and increases nutrition so that relapse after division of tendon will not occur,if the same measures be continued subsequently. Failure after tenotomy is nearly always due to the neglect of manipulation. The special form of apparatus is far less important than a strict attention to details. The chief advantage of the shoe which I employ, lies in the fact that it permits manipulation and stretching without removal, owing to its flexible sole, shank of upper leathers which acts as perfectly as a ball and socket joint, the force being exerted by an elastic strap operating upon the foot through a catgut cord passing through an eye attached to the upright. The eye-bearing arm is ordinarily constructed with too little outward bend. If I can control the patient, I rarely operate until I have the tissues thoroughly stretched, but if the foot cannot be placed upon its plantar surface at eight or

nine months, that is, when the age of walking arrives, tenotomy should be delayed no longer, since each step will increase the deformity. In operating I divide every tissue that interferes with perfect straightening whether it be tendinous or fascial. The tendon of the posterior tibialis is an exceedingly difficult one to sever in a fat infant with poorly developed heel. The puncture should be made just below the malleolus and having placed the back of a tenotome toward the artery, division can be safely made. Tenotomes as found in the shops, have too long a cutting surface for infantile work, as the sharp edge will frequently enlarge the external wound unnecessarily. It is my practice to leave the tendo Achillis until the end of the operation in order to gain its fixation power in the leverage required for stretching the parts into position a procedure which is best accomplished at the time of operation. The amount of power which should be employed in this process, is governened by the degree of resistance and the caution of the surgeon, especial care being taken that the force be expended only on the resistant tissues. In the class of cases with which this paper deals, namely young infants, it is scarcely possible that tarsectomy could be called for, although an English surgeon has thus operated upon a sixteen months old babe. I now use the gypsum dressing entirely after tenotomy, since it is not only less expensive, but chiefly because it holds the foot and heel in much better position than is possible by any apparatus and is less liable to produce sloughing since the pressure is exerted over the entire surface. The instances where plaster produces a slough are always due to faulty application, mainly caused by some indentation produced during the setting process. If the bandages are smoothly and rapidly applied (salt having been added to the water in which they are immersed), the surgeon can by grasping the knee hold it steadily in place, while with the palm of his other hand placed against the plantar surface of the child's foot, complete rectification can be maintained until the plaster hardens without any danger of depressing any region of the cast. A dossil of curled hair or cotton placed over the ball of the cuboid or astragulus and confined in position by the flannel bandage enveloping the foot will also assist in averting any harmful pressure.

I cannot too strongly emphasize my appreciation of plaster of Paris in the treatment of fracture in infants, giving, as it does a perfectly adaptable material and yet, when hardened, securing an immobility of the injured part that permits free handling, provided the articulation both above and below the injury is included in the dressing. This is feasible even in fractures near the hip, since the splint can be made to encircle the thorax and thus prevent the great motion that is always present if only the pelvis is fixed. No risk of injurious swelling need be feared, if a flannel bandage or a thin layer of cotton is first applied to the limb. It is better to saw open a dressing at the end of two weeks and either tighten it or apply a new one. Silicate and other rigid dressings harden so slowly that displacement may occur during the process. The fractures occurring during birth are often over-looked for several days, and the fact that the child moves a particular portion of its body freely is not proof that lesion of bone has not occurred. I have seen several instances of fractured clavicle in which the child indulged in most vigorous movement of the arm. These collar bone breaks are quite common either from falling out of bed or from careless handling, or from the playful jerking of other children. The under waist of an older child placed in proper position over the well arm and pinned tightly around the body so as to include the injured member often keeps in place better in fat babies than a Velpeau bandage, especially if the hand is secured with a loop. Borated cotton should be placed in the axilla.

Greenstick fractures are best treated by etherizing the child and slowly straightening the bone by hand pressure. Even should complete solution occur, the result will be good. A slight curve can be reduced by splint and bandage. Separation of epiphyses are practically fractures and should be treated as such.

Dislocations do not differ from similar injuries in adults save that they are even more readily replaced by manipulation.

The resultant deformities of infantile paralysis are numerous and are frequently passed over by both physician and parents, under the erroneous impression that nothing can be done for the relief of these poor weakened members. Recognizing that restoration is best accomplished by massage, electricity, etc., and particularly by action, it is my rule never to assist a muscle if it is capable of permitting locomotion, or unless deformity is being produced by non support. The following are the considerations that determine the necessity for apparatus. If a bone is bending, or an articular surface becoming distorted, or a ligament yielding, or muscles becoming atrophied from excessive stretching, or if by

applying a support, the child can be made to walk, then I always order an apparatus which shall not take the place of the enfeebled muscles or put them in splint, at rest, but which shall render just enough assistance to enable them by hard contraction to accomplish the desired purpose. If rigid steel is used they will soon relinquish their attempts at assertion of power and enfeeblement will increase. By a judicious adaptation of mechanical appliances, many who are now condemned to chairs and beds can be placed upon their feet. The advisability of tenotomy will depend upon the benefit to be gained by such a procedure. In many cases, it will assist greatly in placing limbs in proper position for locomotion and for this reason its mechanical effect should be thoroughly studied. My observation leads me to believe that it is employed too seldom. The excision and shortening of tendons by suturing is often of advantage. Any irregularity in the length of limbs should be counteracted lest lateral curvature result.

Naevi if situated upon exposed portions of the body, must be cured early in life if rapidly increasing in size and in the majority of cases should be attended to before six months is reached. The question of excision, ligature, subcutaneous ligature, injections, electrolysis or sun-heat, will depend upon situation, size, etc.

Webbed fingers and supernumerary toes and fingers will yield smaller resultant scars, if operated on during the first half year of life.

Wry-neck may follow injury to the spinal accessory nerve during labor or it may be found as a result of some of the exanthemata. If resistant to local and constitutional remedies, myotomy should be performed at the end of a year.

Spinal caries in young children can be retarded by placing the sufferer upon its back between two sand bags, while passive motion is employed to develop muscular power. A jacket or cuirass may be added if bone death is rapid or if difficulty of retention is experienced. Horizontal extension is rarely necessary. I have occasionally seen lateral curvature in weak infants caused by the mother's habit of always holding them in one position, the reversal of which custom, has together with constitutional remedies, completed a cure. It may also be the result of a rachitic tendency which will necessitate the appropriate medicinal and hygienic management. Simple posterior curvature and also lordosis are sometimes found and should be closely watched, as other symptoms of that disease of mal-nutrition, rickets, may soon present themselves. Dorsal decubitus should be maintained until the proper medicinal and hygienic treatment has had time to strengthen the child. Rickets, fortunately, is seen upon this side of the Atlantic far lets frequently than on the Eastern shores, and I am thankful to say is seldom found in Philadelphia even as compared with New York. In fifty thousand cases in our hospitals, I find that less than fifty are enumerated under rickets and its results, including knock-knee, bow-legs, etc. Its onset is usually within the first six months of life, but unfortunately many cases are not brought to the notice of the surgeon until one or two years have elapsed and great deformity has alreadyresulted. When pronounced,the most rigid care should be taken to prevent distortions from which no bone in the body seems exempt. The effects upon the female pelvis are most disastrous as life is thereby endangered. The recumbent position is the only safe one and must be maintained until the general remedies have time to act, passive motion meanwhile taking the place of action. The tibial curves are the most common of defects. Very slight bowing is sometimes corrected in the growth of the individual, but we have no more right to expect that such a result will spontaneously occur, than that a crooked tree shall be be blown into the upright position by chance winds. The proper means should always be used to compel rectification. If the bones are spongy, then much can be expected from manipulation, pressure and apparatus properly constructed. During the first two years of life, we may confidently hope to accomplish a good result by such means, but in later. childhood or adult life, if the deflections are great, the bones rigid and especially, if the curve is anterior, but little can be gained by these means, and osteotomy is the more certain and speedy means of relief. The risks of this operation if done antiseptically are but very slight, as the case if sealed, becomes one of simple fracture. Plaster of Paris again gives us the best fixation after operation and is very comfortable to the patient.

I approve of instruments in lateral bow-legs, but when they fail to secure straight limbs in the class of cases above mentioned, I firmly advocate operation. To permit the deformity to continue is not only unsightly, but also interferes greatly with the locomotive power. It is not true that a bow-legged man is strong. He has on the contrary to use his limbs at a disadvantage and if he is vigorous, is is in spite of his complaint.

The question of tracheotomy in young infants with whom our present discussion chiefly deals, is one demanding the gravest consideration, whether the dyspnea originates from diphtheria or from true croup. So fatal are the results, that the mortality in babes below the age of six months is placed by some writers as high as 95 per cent, and even taking all cases under two years, we can not expect to save more than from ten to fifteen per cent. When we consider however,that some English writers place the mortality of croup without operation at 90 per cent we cannot believe that the operation has at least increased the number of deaths. Moreover when cases are taken at the most favorable age and conditions, we can scarcely hope to save more than 25 per cent of all cases operated on. I have spoken thus in regard to prognosis since some surgeons absolutely condemn the employment of tracheotomy for these young cases. I cannot feel however, that they are absolutely hopeless and if surgery can relieve them from the horrid death by suffocation, we should not hesitate to give them the aid of science, although a true tracheotomy is well nigh impossible in a young, fat infant owingto the exceeding shortness of the trachea and the great size of the thyroid body. It is usually best to do an interior laryngotomy (or crico-thyro-laryngotomy), making the opening through the crico-thyroid membrane and also through the cricoid if necessary. The risk of hemorrhage is thereby greatly diminished, since while the crico-thyroid arteries may be cut, they will be far less troublesome to secure than will the vessels around the thyroid body or the middle thyroid artery which often lies in front of the trachea. Again the innominate artery may rise high in the neck or wound of a vein near the innominate, may speedily kill the little one, as has happened in a number of instances even when the operator has been experienced. The fact that surgeons who have opened the windpipe several hundred times, look upon this operation as an exceedingly difficult one, is proof that the utmost care is necessary. The danger of wandering from the median line may be partially obviated by having the child's head kept perfectly straight and by placing the body in an exact line with the table. The trachea is sometimes missed because it has not been thoroughly cleared of everything before attempting to open it. The puncture should be made firmly but guardedly. The size of an infant's trachea will surprise one who has never studied it. Although I had given large and special study to the anatomy of childhood both from the cadaver and clinically, my first tracheotomy case died on the table before I could insert the tube, my error being in trying to push the canula too far back. Unless the urgency is great, ether should be given in moderate amount and the operation carefully performed. A plunge into the trachea is never good surgery, in infants it would be worse than folly. If a circular piece is taken from the crico-thyroid membrane and cricoid and a pilot used, introduction will be rendered more easy. In fat necks, the windpipe may be brought nearer the surface by extending the head far backward and by grasping the tube on either side and drafting it forward. If fixed thus to the median lines and retained continuously by an assistant much time will be gained. In a recent case, I found it wiser to go above a large thyroid body even in a five year old child and insert the canula in the crico-thyroid space. There was afterward a slight burying of the upper edge of the plate owing to its high position, but a strip of sheet lead obviated this difficulty. To arrest the venous hemorrhage, just before puncture, hot water sponges answer admirably. After operation the temperature of the room should be kept above 80°. I have never opened the larynx to remove a foreign body in a very young child, but the universal habit of making the mouth a general receptacle of everything makes the introduction of such substances exceedingly probable at from one to two years,

Foreign bodies in the nose, which cannot be seized, if not removed by stennutatories, should be always sought for with the aid of anesthetics.

In the ear, the opposite mode holds good, since consciousness of pain will often prevent an unskilled practitioner from doing great injury to the membrana tympani.

Joint diseases are best treated by recumbency with fixture or extension. Excisions are rarely performed at this early age, and need not therefore be discussed.

I omit strumous and syphilitic diseases and a score of other conditions, which might well detain us for hours, since time forbids.

I have thus, gentlemen, hastely touched upon only the more frequent of the surgical maladies met with in daily practice among infants. Many of the suggestions may be already familiar to you, but even the brief mention which I have been allowed to bestow upon each subject may possibly have served to revive in your minds old and forgotten experiences and thus be helpful. You will at least see that the field is a wide one and that results are most encouraging.

1818 Chestnut Street.

SOCIETY PROCEEDINGS.

ILLINOIS STATE MEDICAL SOCIETY.—ABSTRACT OF THE THIRTY-FIFTH ANNUAL MEETING.

Springfield Ill. May 19, 20, 21, 1885.

TUESDAY'S SESSION.

After adjournment of the morning session, (See REVIEW, Vol. XI, page 454). Dr. David Prince, of Jacksonville read "The Report on Gynecology" and was followed by Dr. C. W. Earle of Chicago with "The Reports on Obstetrics."

"The Report on Materia Medica and Therapeutics" was offered by Dr. T. M. McIlvaine of Peoria. He dwelt on Therapeutics Natural or Medicinal and Therapeutics non-medicinal and advocated a non-medicinal plan of treatment of applicable. In the discussion the sentiment expressed was to follow indications and be simple in prescriptions.

Dr. W. T. Montgomery of Chicago presented the "Report on Ophthalmology.,, The use of Jequirity, and of Hydrochlorate of Cocaine was reviewed. The author reported good results with fresh infusion of jequirity-bean, ¼—5 per cent. He regarded it a specific in granulations with pannus. In the discussion, cautious care was advised in its use.

WEDNESDAY'S SESSION.

Dr. J. H. Rauch, Secretary of the Illinois State Board of Health, spoke on Medical Legislation. He referred to the Medical Practice Act, to Vital Statistics, the State Sanitary Survey, etc.

Dr. A. B. Strong of Chicago called attention to the Anatomy bill, which was pending and believed it should be mandatory for Board of County Commissioners to supply medical colleges with the bodies of dead paupers for dissecting material. Another good point raised, was to have a statute framed, so that when medical men were sued for malpractice, the patient should be made to deposit funds sufficient, in case the physician gained the suit, to reemburse him for expenses and loss of time.

Dr. E. P. Cook spoke of the so-called Campbell bill, concerning the Commitment and Care of the Insane. The members of the Society who were also members of the Legislature expressed themselves in favor of all these measures, and promised their support.

RECURRENT LARYNGITIS

was the paper submitted and read by Dr. E. F. Ingalls of Chicago. His conclusions were:

1. The affection was usually dependent upon nasal obstruction.
2. The obstruction in the majority of cases was due to deflection and thickening of the septum, or hypertrophic catarrh.
3. To effect a permanent cure, local remedies were unreliable and the obstructing tissues must be removed.
4. Operative procedures for the removal of these obstructions might be made painless by the use of hydrochlorate of cocaine.
5. This method of treatment, properly carried out, might be relied on to cure the catarrh and the laryngitis of which it was the cause.
6. Great improvement in the general health often immediately followed the removal of the nasal obstructions.
7. In acute colds or exacerbations of hypertrophic catarrh, immediate relief might be obtained by insufflations, as often as needed, of small quantities of cocaine.

Dr. J. P. Matthews followed with a report of a Case of "Tracheotomy.

Dr. A. E. Hoadley of Chicago protested against "Too frequent Infant Feeding and the Use of One Cow's Milk."

"Traumatic Tetanus" was reported on by Dr. C. Truesdale, of Rock Island, a Member of a Special Committee on the subject.

"The Report of a Special Committee on Insanity was read by Dr. R. J. Patterson of Batavia. Home-Treatment, rest, nutritious feeding and tonics were recommended."

"Alcohol as a Therapeutic Agent was reported on by Dr. M. F. Bassett of Quincy, member. of a Special Committee.

Dr. A. Wetmore of Waterloo, Committee on Physiology, read a paper on "How the Vitality of a Seed is preserved." He believed in a dormant state of the seed; a hibernation as it were.

"The Treatment of Epilepsy" was reported on by Dr. D. B. Brower of Chicago. Surgical and Medicinal Measures were fully discussed.

The Committee on Nominations then reported the following nominations: For president, Dr. W. A. Byrd, of Quincy; first vice-president, Dr. W. T. Kirk, of Atlanta; second vice-president, Dr. A. Wetmore, of Waterloo; permanent secretary, Dr. S. J. Jones, Chicago; treasurer, Dr. Walter Hay, of Chicago. Judical Committee, Dr. E. F. Ingals, of Chicago; Dr. F. B. Haller, of Vandalia; Dr. W. Hill of Bloomington. Assis-

tant secretary, Dr. Harlan Luce, of Bloomington. Committee of Arrangements, Dr. J. L. White, Dr. T. H. Worrall, Dr. Lee Smith, Dr. Burns, Dr. W. Hill, of Bloomington. Committee on Practical Medicine, Dr. J. J. M. Angear, of Chicago; Dr. H. R. Guthrie, of Sparta. Committee on Surgery, Dr. C. Truesdale, of Rock Island; Dr. T. M. McIlvaine, of Peoria. Dr. M. Reece, of Abington. Committee on Obstetrics, Dr. W. W. Jaggard, of Chicago; Dr. Hugo Rothstein, of Waterloo; Dr. E. Ingersoll, of Canton. Committee on Gynecology, Dr. J. H. Etheridge, of Chicago; Dr. M. J. Mergler of Chicago; Dr. C. C. Hunt, of Dixon. Committee on Materia Medica and Therapeutics, Dr. E. B. Montgomeey, of Quincy; Dr. J. M. G. Carter, of Waukegan; Dr. Catherine Miller, of Lincoln. Committee on Opthalmology and Otology, Dr. Robert Tilley, of Chicago; Dr. A. C. Corr, of Carlinville; Dr. W. T. Speaker, of Mt. Morris. Committee on Necrology, Dr. E. F. Ingals, of Chicago; Dr. W. Hill, of Bloomington; Dr. C. W. Cox. Committee on Orthopedic Surgery, Dr. C. E. Webster, of Chicago. Committee on Diseases of Children, Dr. F. E. Waxham, of Chicago: Dr. E. B. Slater, of Aurora. Committee on Microscopy in Gynecology, Dr. O. B. Will, of Peoria. Committee on Dermatology, Dr. H. J. Reynolds and Dr. W. J. Maynard, of Chicago. Committee on Publication, Dr. J. F. Todd, of Chicago. Committee on Physiology, Dr. A. Wetmore, of Waterloo. Committee on Insanity, Dr. Barnes, of Bloomington. Committee on Legislation for the Insane, Dr. Walter Hay, of Chicago; Dr. E. P. Cook, of Mendota; Dr. B. F. Haller, of Vandalia. Committee on Medical and Sanitary Legislation, Dr. B. M. Griffith, of Springfield; Dr. W. A. Haskell, of Alton; Dr. A. B. Strong, of Chicago; Dr. J. L. White, of Bloomington. These nominees were elected. It was decided to hold the next meeting at Bloomington, beginning on the third Tuesday of May, 1886.

THURSDAY'S SESSION.

Papers on Medical Education were read by Drs. H. R. Guthrie, of Sparta, and G. N. Kreider of Springfield, and were discussed at some length by Drs. Mileham, of Quincy, Henry D. Byford of Chicago, C. W. Earle, of Chicago, A. Wetmore of Waterloo, Myers of Petersburg, Wenger of Gilman, and Richards of Joliet.

Dr. H. J. Reynolds of Chicago, read a paper on Eczema. A report from the Committee on Practice of Medicine was made by Dr. N. Budge of Chicago, and Dr. C. H. Norred of Lincoln, followed with an interesting and exhaustive report from the Committee on Medical Jurisprudence.

Dr. William A. Byrd of Quincy, chairman of the Committee on Surgery, made a report in abstract from that committee, and this was followed by a paper by Dr. W. H. Veatch of Carthage, on Obstruction of the Bowels. A paper on Ophthalmology was read by Dr. Robert Tilley of Chicago,and one by Dr. I. N. Danforth on Simple Renal Catarrh.

"The Doctor in Court" was the title of a paper read by Dr. C. H. Norred, of Lincoln, Ill. He said medical evidence was often underrated, because the doctors disagreed in court and in almost every instance they disagreed because they were not thoroughly conversant with their subject. He analyzed the medical testimony in the Carpenter-Burns murder trial, the prosecution being that the girl was killed the night previous to the morning she was found. The defense proved Carpenter at home at 10:30 P. M., but from 7 to 10:30 P. M., they could not account for him. He said the girl was killed the next morning, which was very vigorously opposed by the prosecution, but in a subsequent trial of the case in the circuit court the prosecution acknowledged in open court his theory as to the time she was killed.

A change in the by-laws was recommended that the annual dues be changed from $3 to $2 per annum, and that members be required to pay their dues annually.

The report of the Treasurer, Dr. Walter Hay, was approved. It showed that there was $900 in the treasury. On motion it was decided to appropriate and pay the treasurer, and the chairman of the committee on publication $50 per annum each for clerk hire. Letters of regret were read from absent members, and some communications were read from Nebraska and New Jersey. A vote of thanks was extended to the committee of arrangements and to the local members of the society who entertained the members so pleasantly.

President-elect Byrd was introduced and a vote of thanks was tendered the retiring President.

Delegates to the American Medical Association were appointed as follows: Drs. A. E. Hoadley, J. D. Skeer, L. H. Montgomery, H. T. Byford, W. W. Jaggard, H. J. Reynolds, C. W. Earle, Robt. Tilley, D. R. Brower, M. J. Mergler, W. E. Quine, W. T. Montgomery, S. J. Jones, Walter Hay, A. E. Baldwin of Chicago; C. Truesdale of Rock Island; C. H. Norred of Lincoln; H. B. Buck, and B. M. Griffith of Springfield, E. P. Cook of Mendota; C. Goodbreak of Clinton; C. C.

Hunt of Dixon; John Cook of Beecher City; D. S. Booth of Sparta; E. B. Montgomery of Quincy, B. F. Haller of Vandalia; B. F. Crumer of Warren; J. H. Ledlie of Pittsfield; F. Cole of Elpaso; S. C. Plummer of Rock Island; William Dougall of Joliet; R. W. Gillette of Danville; N. S. Reed of Chandlerville; E. A. Ingersoll of Canton; C. Sanders of Ottawa; S. J. Remsberg of Lemoille; H. Judd of Galesburg; W. T. Kirk of Atlanta; William Cox of Mt. Sterling; C. M. Vertrees of Murraysville; T. L. McElvaine of Peoria; A. F. Rooney of Quincy; J. L. White of Bloomington; A. Wetmore of Waterloo; A. K. Van Horn of Jerseyville; and W. H. Veatch of Carthage.

To the Missouri State Medical Society, E. A. Cook of Mendota; C. W. Earle of Chicago; W. A. Byrd of Quincy and D. S. Booth of Sparta; were appointed. To Pennsylvania, C. H. Norred of Lincoln; and to Indiana, P. W .Mendenhall of Georgetown.

SOUTHERN ILLINOIS MEDICAL SOCIETY.

REPORTED FOR THE REVIEW BY J. B. ROSSON, M. D., VERGENNES, ILL.

The Southern Illinois Medical Association held its Eleventh Annual Meeting at Waterloo, Ill., June 18, and 19, 1885.

The Association was called to order by the President, Dr. Hallam, at 10 o'clock A. M., on the 18th.

The address of welcome on behalf of the physicians of Monroe county was delivered by Dr. Nixon, President of the Monroe County Medical Society.

The address of welcome on behalf of the citizens of the city, was delivered by Mr. Richardt, and the same was responded to by Dr. A. Wetmore.

Adjourned to 1 P. M., when the society was called to order by the President.

Prayer was offered by Rev. Dr. Caughlin.

Minutes of previous meeting were read and approved.

The secretary read notes from absent members and also from Mrs. S. Allen West and C. H. Blair on temperance matters.

A letter was read from Dr. John L. Billings, Surgeon-General of the United States, requesting the secretary to forward copies of the proceedings of the society from 1881 to the present time, and upon motion the secretary was requested to comply with Dr. Billing's request.

The secretary and treasurer made their reports, the latter reporting $150.90 on hand. Adopted.

Dr. Wetmore of the Committee on Anatomy and Physiology delivered a lecture on the kidney in which he advanced the theory that the urine was simply passed into the kidney by the process of osmosis and was not the result of cell secretion.

A lively discussion took place between Drs. Bernays, Wetmore and Ohmann-Dumesnil.

Dr. Rothstein read an interesting paper on Hygiene.

Dr. Rumbold made remarks and read an able paper on Pruritic Catarrh and an interesting discussion took place between Drs. Hughes, Rumbold, Hallam and Wetmore.

Dr. Rosson reported two successful cases of tracheotomy performed to extract foreign bodies. The subject was discussed by Drs. Bernays and Hallam.

Dr. Dyer discussed the subject of hydrorachis and reported some cases, and a discussion by Drs. Hughes, Bernays, Ohmann-Dumesnil, Wetmore and Dickinson followed. Dr. Hughes reported a case of menstruation in a little girl four years of age and in this connection Dr. Brandts also related a case of a similar character.

Dr. Hallam related a case of cardiac disease in the case of a little girl, which resulted from articular rheumatism.

Dr. Dyer introduced the subject of cholera, and a discussion on the reasons for using the chlorine test, in well water followed, participated in by Drs. Hughes, Dyer, Wetmore, Hallam, Dickinson and Ohmann-Dumesnil.

Dr. Ohmann-Dumesnil read paper on syphilis. The subject was discussed by Drs. Hughes and Brandts.

Adjourned to meet at 7.30 P. M., when the members and the citizens of Waterlo assembled to hear lecture delivered by Dr. Hughes of St. Louis on Bacteriology.

On motion the thanks of the association were tendered Dr. Hughes for his instructive lecture.

The following officers were elected:

President, Dr. Beaty; First Vice-President, Dr. Wetmore; Second Vice-President, Dr. Leiper; Secretary, Dr. Huntsinger.

The old Board of Censors were retained.

Adjourned to meet next morning at 8 A. M., at which time the society was called to order by the President.

On motion the time of reading papers was limited to fifteen minutes.

On motion of Dr. Dyer, Dr. Rosson was retained as stenographer.

Dr. Booth read paper on Progressive

Muscular Atrophy, and a discussion followed, participated in by Drs. Hughes and Hallam.

Dr. Rosson reported a case of poisoning by atropia in which the temperature rose to 105.8 Fahr.

Dr. Ferrel related some cases of poisoning by stramonium.

The following delegates to the American Medical Association were appointed:

Drs. Ferrel, Marshall, Berkebile, Leiper, Rosson, Huntsinger, Guthrie, Mann, Rothstein, Makenzie, Orr, McMillan, Thompson and W. A. Gordon.

The following are delegates to the State Medical Society:

Drs. Wetmore, Hallam, Gordon, Marshall, Leiper, Ward, Guthrie, Ormsby, Rainey, McMillan, Mackenzie, Booth and Charming.

The subject of Medical Education was discussed by Drs. Ferrel, Guthrie, Hallam, Booth, Makenzie, Mudd and Wetmore, and the latter, a member of the Committee on Medical Education introduced the following resolution which was adopted:

Resolved, That it is the sense of this Association that the teaching power and the licensing power to practice medicine should be separate and distinct. That it is not necessary to create an examining board but the sole examing power may be conferred upon the State Board of Health which should be composed of men in high standing in the active practice of medicine and having no connection with the medical colleges or other teaching body.

Dr. Bernays exhibited a cystic tumor of the inferior maxillary and a diverticulum of the intestine.

Dr. Mudd reported a case of stone of the bladder.

Dr. Hallam reported a case of extra-uterine fetation of thirteen year's standing.

Dr. Makenzie made some remarks on the care of the fetus after birth, and the subject was discussed by Drs. Booth, Hallam, Guthrie and Marshall.

The subject of the Ligation of Arteries was discussed by Drs. Wetmore, Booth, Mudd and Borck.

Dr. Guthrie read a paper on Perforation in Typhoid Fever and reported a case with sclerosis of the liver as a complication.

Dr. Booth read a paper on Retrocolic Abscess with Cancer Following.

The Etiology and Progress of Cancer were discussed by Drs. Mudd, Bernays and Hughes.

Adjourned.

Called to order at 1 P. M.

Dr. Ferrel moved that a committee be appointed to confer with a committee of the State Medical Society on the subject of Medical Education.

Carried.

Dr. Hallam introduced Dr. Beaty, the President elect, who thanked the society for the honors they had conferred on him.

It was decided that the next meeting should be held at Coulterville, and Drs. Leipsen and Edgar were appointed as Committee of Arrangements.

On motion thanks were tendered the Odd Fellows for the use of their hall and the citizens and physicians of Waterloo for their hospitality.

Adjourned to meet at Coulterville on the third Thursday of November.

J. L. Hallam, President,
H. P. Huntsinger, Secretary.

ITEMS.

—Dr. Noel Gueneau de Mussy, a renowned Parisian, is dead.

—Dr. Chibret lately reported to the Paris Academy of Medicine that he had replaced the eye of a young girl with that of a rabbit. No mention is made whether the patient can see or not. Further details are looked for.

—Lucille Yseult Dudley was acquitted for her homicidal attack on O'Donovan Rossa. She is said to be an epileptic and has had several attacks of mania.

—An explanation offered for the prophylactic effect of Ferrán's inoculations is that it imparts a feeling of security, drives away fear and terror. A cable report to the Herald states that the inoculation may be interpreted as a kind of faith-preventive.

—Professor Gerhardt, of Wurzburg, is to succeed the late Prof. Frerichs, in the Chair of Medicine, at Berlin.

—The St. Louis Medical Society has adjourned for the summer.

—Corneal opacity frequently follows continued employment of cocaine. Dr. J. Craft, of Cleveland, O., explains it as a nutritive disturbance consequent upon the vasculor constriction and depletion that ensues.

—Miss Hai-Mé King, a native of China, received the degree of M. D. at the Commencement of the Women's Medical College on May 29.

THE WEEKLY MEDICAL REVIEW.

MEDICINE AND SURGERY.

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BRAIN SYPHILIS.—The Quarterly Compendium of Medical Science recites the following:

As of interest in connection with this interesting subject, we note that before the Medical Society of London (April 27), Dr Althaus read a paper on this case, which was that of a clerk, aged 28, who had had a hard chancre about four years before, and after having been apparently well for three years, was affected with ophthalmoplegia of the left eye, and six months afterwards with hemiplegia of the right side. When admitted into the hospital, he showed almost complete paralysis of all the muscles supplied by the third, fourth and sixth nerves, including the iris and ciliary muscle. The intellect was impaired; and there was incomplete hemiplegia of the right side. Dr. Althaus argued that this group of symptoms could only be due to syphilis. With regard to the hemiplegia, he laid stress on the age of the patient, the fact that there had been no apoplexy when the stroke occurred, and that the paralysis had been incomplete from the beginning. Ordinary hemiplegia did not occur in the prime of life, except where there was heart-disease, or diabetes, or tabes spinalis, or alcoholism; it was almost invariably ushered in by apoplexy, and was complete for the first few days or weeks, nor was it accompanied with palsies of the ocular muscles. A peculiar symptom inthe present case was an enormous exaggeration of the tendon-reflexes in the palsied limbs, out of proportion to the degree of paralysis as well as of muscular rigidity which were present; and Dr Althaus was inclined to consider this as a pathognomonic symptom by which syphilitic hemiplegia was distinguished from ordinary hemiplegia. With regard to the nature and seat of the pathological lesion, he argued that there was a gumma at the base of the brain, near the inner surface of the crus cerebri, close to the pons Varolii, which, by compression, had caused paralysis of the three cranial nerves mentioned, and by further extension later on to the crus itself, which contains the crossed pyramidal strands, caused softening of these parts, and thereby hemiplegia. He concluded with some remarks about the prognosis of syphilitic lesions of the brain generally, stating that specific treatment was only successful in primary and truly specific lesions; but where a gumma had already caused wasting of the cranial nerves and softening of cerebral tissue—that is, secondary and non-specific lesions—no amount of mercury and iodide of potassium could effect a cure. From this he drew the conclusion that an energetic specific treatment should be adopted as soon as the slightest symptom of syphilitic brain-disease was observed, so as to disperse the primary specific lesion, and prevent the occurence of incurable secondary lesions.

Dr. Ord referred to the difficulties of localization of the lesion causing the various symptons in this case. With regard to the symptom specially commented on by Dr. Althaus—exaggeration of the deep reflexes—he should very much like to hear the value of this symptom discussed.

Dr. Drysdale said it was since 1858 that our knowledge of cerebral and spinal syphilis had been gained. He referred to cases of syphilitic lesion of the brain which had come under his notice.

Dr. K. Fowler was interested in the exaggeration of the deep reflexes; he had observed this symptom in neurasthenia from almost any cause. The occurrence of hemiplegia at the period of life mentioned in the

paper was not, in his opinion, conclusive of syphilis.

Dr. Clark asked whether headache had been present in this case. He believed that muscular tone exercised an influence on the deep reflexes. He had seen a case of hemiplegia in the course of renal disease in a young girl.

Dr. Althaus said that, in aphasia due to syphilitic lesion, the prognosis was gloomy. The deep reflexes were not exaggerated in the side which was not paralyzed. Cephalalgia was not present in this case.

How Shall the Physician Clean His Hands?—The Northwestern Lancet refers to an article in the Centralblatt f. klin. Medizin by Dr. J. Forster, of Amsterdam, containing the results of experiments made with the view to determine whether the ordinary methods of cleaning the hands are really effective in destroying or removing all germs. The experiments were made with great care and all the precautions taken which are necessary in investigation about spores. The conclusion reached was that most of the methods, in common use, of washing and disinfecting the hands, do not succeed in freeing them from spores.

The method of experiment was to wash and scrub the hands in soap and water containing disinfectant substances in various proportions, and then wrap them in cotton-wool which had just been exposed to a temperature of 250° to 285° F. [The author points out that a towel hanging in a room might easily communicate germs to hands wiped upon it, even if the previous washing had been successful in freeing the hands from all organisms.] A finger was then inserted into a meat-peptone solution of Koch's cultivation gelatin in the same manner as in making a vaginal examination. The result was that unless the finger was completely sterilized, colonies of spores developed in the cultivation preparation in from 24 to 60 hours.

The disinfectant substances used were carbolic acid, boracic acid, chloride of lime, chloride of iron and corrosive sublimate. The only disinfectant which completely sterilizedthe finger so that no spores appeared in the cultivation medium, was corrosive sublimate in the proportion of 1 to 1000 or 1 to 2000. Repeated tests with this substance were performed without the development of a single spore in the cultivation medium, which was usually meat-peptone solution in which spores develop very readily. The solution in every case was tested afterwards to show that it could readily be colonized with spores. The hands were always washed with soap and water and scrubbed with a nail-brush before disinfection in the corrosive sublimate solution.

The other substances experimented with failed to sterilize the finger a single time and its introduction into the cultivation medium always resulted in the appearance of colonies of spores. Even the 2½-per-cent. solution of carbolic acid so commonly used for disinfecting the hands failed completely, as did also Billroth's plan of cleaning the hands with hydrochloric acid and a ten-per-cent. solution of phenol in glycerin. It is probable that there is no practical necessity for having the hands absolutely free from spores of every kind, in performing ordinary operations. Still it is a good thing to know how far ordinary methods succeed in disinfecting the skin; more important yet is it for the physician to know how he can surely disinfect his hands after exposure to an infectious disease."

Digital Exploration of the Stomach.—The Philadelphia Medical Times finds the following in Le Progrès Médical:

"In a case reported by Billroth before the Imperial Royal Medical Society of Vienna, of a girl of 19 years, who had swallowed in her sleep an artificial denture, it was found that the foreign body had passed into the stomach. Believing that it could not pass through the pylorus, Billroth performed laparotomy and gastrotomy, but could not find the denture even after drawing the stomach out of the wound. The wound was enlarged and the intestines examined, but in vain. The only part remaining unexplored was the

posterior portion of the stomach, situated behind the gastro-splenic ligament towards the vertebral column. Introducing his hand into the stomach, the article sought for was found and removed. He then brought the gastric wound together with ligatures and cauterized it, and closed the abdominal wound. The patient recovered.

The case was reported in order to show where to search for a foreign body in future, and to demonstrate that the stomach cannot without great difficulty be brought outside of the abdominal wound. In attempting this the foreign body was carried back to the posterior portion of the stomach, where it at first escaped detection."

Coca in Phthisis.—Dr. J. Blake White states in the Medical Record that he has for several weeks been testing the effects of coca in phthisis, and the results thus far obtained tend to confirm his belief in the therapeutic value of the drug in this and other wasting diseases. "Prescribed in some cases of advanced phthisis associated with great physical depression it exerted a wonderful tonic effect, substituting a cheerful and hopeful state for one of despair, and in proportion establishing an improved condition of health. In some cases in which night-sweats were quite profuse the remedy seemed to have exercised a controlling influence. A more refreshing repose and a better appetite were observed in patients who had taken the wine of coca for a week or more, when prior to this treatment insomnia and anorexia were painful symptoms." Dr. White adds that coca is now being thoroughly tested in his service in Charity Hospital, and he hopes to be able to supplement this notice with a more full report concerning the value of the drug in the management of consumption.

We are prepared to report like effects from the fluid extract of coca in a case of purulent bronchitis in an elderly lady-patient.

Syphilis and Tabes.—The Medical Record abstracts Virchow's Archiv, January, 1885: "Prof. Eulenburg, of Berlin, has published an article on the question, so much discussed of late years, concerning the relation between syphilis and locomotor ataxia. The following propositions represent the views which he now entertains on the subject:

1. There is an absolute and relatively somewhat large percentage of tabetic patients who have suffered from syphilis; the number of these is considerably larger than was generally admitted until within the last few years.

2. The exact relation of syphilis to tabes is uncertain. Probably in most cases syphilis acts only as a debilitating predisposing cause, like many other agencies—such as heredity, mental affections, etc.; but perhaps in some instances syphilis is the direct cause of tabes.

3. At any rate, syphilis can hardly be considered to be the most frequent and most important cause of tabes.

4. The cases of tabes which have been preceded by syphilis present no constant and characteristic symptoms, nor any peculiarity in their course, by which they can be distinguished from other (non-syphilitic) cases.

5. As regards prognosis and treatment also, there is no clear and characteristic distinction between the two classes of cases. Those with syphilitic antecedents may in certain circumstances improve, perhaps even recover, either with or without specific treatment; while, as a rule, such treatment is either of no avail or only attended by temporary benefit.

6. The investigation of the etiology and pathogeny of tabes in relation to syphilis, which has been prominent of late years, has not yet afforded any definite solution of the question; nor, according to the experience of the author, can the discussion be said to have yet led to any permanent result as regards the best treatment of tabes."

Nutritive Dressing of Large Granulating Surfaces.—Dr. Willam Barton Hopkins thus writes in the Therapeutic Gazette, (Quart. Comp. Med. Science):

"Martin A.,æt. 26, a man in vigorous health

and temperate habits, a brakeman by occupation, was brought to the Episcopal Hospital November 23, 1884. While coupling freight-cars his right elbow had been caught between the buffers, which nipped the limb and squeezed the forearm and elbow through a long tear in the integument, as a grape is forced by pressure through a rent in its skin. There was no bone or joint involved in the injury, and the deep fascia had also, to all appearances, escaped, except at one or two points; one, notably, just above the elbow, where a deep wound in the muscles extended down close to the brachial artery. Although no tissue had been lost, the greater part of the integument of the forearm and elbow had been stripped off, and lay curled up upon the anterior aspect of the limb. After being carefully washed with carbolated water, the wound, which extended from the lower part of the forearm to a point about four inches above the elbow, was loosely approximated, and dressed with carbolized gauze, dusted with iodoform. Two days later, owing to the high grade of inflammation which followed, this dressing was discontinued, and irrigation with carbolated water (one part to forty) used instead,and aconite was given internally. General sloughing of the entire flap of integument, and also of the muscles of the arm and forearm, followed. The elbow-joint narrowly escaped involvement, its whole contour becoming plainly visible, covered only by capsular ligament, which latter, however, fortunately remained intact. Owing to the perfect drainge which could be obtained, and free irrigation, which was persistently continued for two weeks, the great mass of sloughing, gangrenous tissue remained entirely free from odor, and, notwithstanding the patient grew exceedingly weak and became rapidly emaciated, his temperature seldom exceeded 100°, and he showed no symptoms of sepsis. At the end of three weeks the sloughs had mostly come away, and healthy granulations began to fill up the depressions and even off the surface of the large ulcer remaining. Five weeks after the accident improvement had come to a standstill. The excessive drain from a suppurating surface, which at this time extended over an area of one hundred and five square inches, began to tax too severely his alreay enfeebled nutritive powers. He had complete anorexia, became nervous and irritable, had night-sweats, and his temperature became elevated, reaching 102° and 102½°. He had beginning hectic. Cicatrization had been going on for some time, but was feeble and tardy; while the discharge from the ulcer was free and comparatively healthy.

Asuming that a granulating surface, might if suffiiciently large be made use of with benefit as a medium for the administration of nutritive material, and that certain such materials could be applied to it which would not interfere with the processes of cicatrization, it was determined to employ for this purpose an emulsion of cod-liver oil, to which was added five grains each of pepsin and pancreatin to the ounce. The ulcer was accordingly dressed once a day with lint soaked in this preparation. A very decided change was soon observed to take place in both the general and local conditions which I think could be fairly attributed to the change in the dressing, as care was taken not to alter his general treatment while the experiment was being made, and as the dressings which had been previously used were negative so far as their constitutional effects were concerned. His appetite began rapidly to improve. Food was taken in much larger quantities, was eaten with relish, and properly digested.

The effects upon the ulcer were clearly secondary to those upon the general condition, as no changes were noticed in it until after marked improvement in the latter had occurred. Then it began to cicatrize with rather remarkable rapidity, in fourteen days having become reduced in area to seventy-seven square inches. The patient's face had lost its sunken, drawn expression, and he was now able for the first time to be out of bed. A number of skin-grafts were applied at this time, and the dressing therefore discontinued, lest it should interfere with the process

Ten days later, several of the grafts having been found to have taken, the nutritive dressing was reapplied, and continued for two weeks longer. The indications for its use, however, seemed to have ceased, and no particular effect was noticed, except that healing progressed favorably with it, and that it was otherwise unobjectionable. The ulcer was afterwards strapped until the patient was transferred to the out-department, March 17,1885,about four months after the accident. Three small ulcers remained, the dimensions of which were,respectively, about two and a half inches, one by one and a half, and one by one. Owing to loss of structure and cicatricial contraction, there was little movement at the elbow, but the hand was quite useful.

Further tests of this plan of treatment are necessary in order to properly estimate what value it may be as a therapeutic means in combatting suppurative exhaustion after extensive loss of cutaneous tissue from other causes, as burns and scalds, as well as from lacerations. Should such tests corroborate the evidence adduced in this case, the method will probably be found most frequently applicable after burns, as they so often destroy life solely from inability of the digestive system to supply sufficient nutriment to compensate for the inordinate waste incident to prolonged excessive suppuration."

Disinfection in Cholera.—At the International Sanitary Conference held in Rome June 2–6, the report of the Subcommittee appointed to consider the best methods of disinfection in cholera, and consisting of Drs. Koch, Sternberg, Thorne, Proust, Eck, Semmola, and Von Hofmann, was laid before the Technical Committee and adopted. It is thus worded:

"The Subcommittee recommends as methods of disinfection: 1. Steam at 100° C. 2. Carbolic acid and chloride of lime. 3. Ventilation. Of the carbolic acid and chloride of lime, two solutions are to be used: a. The weak, containing two per cent of carbolic acid and one per cent of chloride of lime. b. The strong, containing five per cent of carbolic acid and four per cent of chloride of lime. They are to be applied as follows: 1. For personal disinfection, by washing and bathing, with the weak solutions. 2. For disinfection of linen, clothes, bedding, etc., if not destroyed—(a) by passing steam through them for an hour, (b) by boiling them for thirty minutes, (c) by immersion for twenty-four hours in one of the weak solutions, (d) by ventilation for three or four weeks, but only in cases in which none of the other methods are applicable. Leather articles—such as portmanteaux, hand-bags, etc.—if not destroyed, are to be washed several times with one of the weak solutions. 3. For vomited matters and fecal evacuations, the strong solutions are to be used. Recently soiled articles of linen, clothing, and bedding, if not at once subjected to steam at 100° C., are to be immersed for four hours in one of the strong solutions. There must be no washing of corpses. Bodies are to be wrapped up in sheets saturated with one of the strong solutions, and at once put in coffins. 5. Disinfection of goods, letters, and postal packages is superfluous. 6. For the disinfection of ships during the passage: The deck and class where the case or suspected case occurred, and the walls of the cabin or bunk, are to be washed, at least twice, with one of the weak solutions, and then thoroughly ventilated, while the water-closets are to be washed, at least twice daily, with one of the strong solutions. 7. If the drinking-water be suspected, it must be boiled before being used; and, if it have stood twenty-four hours after the first boiling, it must be reboiled. 8. In hospitals on land, the walls are to be washed with one of the weak solutions, then the wards ventilated, and finally white-washed, and the wards used for the reception of cholera cases are to be as far off as practicable from the ordinary ones. The closets in such hospitals are to be cleansed twice daily with a quantity of one of the stronger solutions equal in amount to that of the evacuations passing through them. 9. The clothes of the attendants are not to be

taken out of the hospital, and must be regularly disinfected; and the attendants are to use one of the weak solutions for personal ablution. It was also decided to add to those recommendations another, to the effect that all packet-boats from infected ports should have a steam-disinfecting apparatus on board.

On the closing day the following regulations were passed:

1. That local sanitation be everywhere attended to, and the first cases isolated and disinfected, the means for doing so being prepared beforehand by the sanitary authorities.

2. That immediate notification be made to the proper authorities of every case, or suspected case, of cholera, and the nature of the disease be confirmed by competent medical men, and, in case of death, by necropsy.

3. That a regularly organized medical sanitary service be instituted in every country.

4. That the health officers of every country should have powers to communicate directly without intermediaries, so as to agree upon, and at once adopt, the measures they deem urgent.

5. Particular attention is always to be given to the great through routes by which cholera is imported.

6. International express trains must be changed in passing from an infected into a non-infected country, and a surgeon must accompany every such train, to take the necessary steps in the event of any one falling ill with the disease. Every large station is required to have an isolated room for the reception of such cases.

Dr. T. Lewis showed that this article was unnecessary, as the construction of the great trunk railways in India had not changed the lines on which cholera travelled in that country, nor increased the rapidity of its movements.

7. Passenger-boats on large rivers are to be rigorously inspected, overcrowding is to be prevented, and a medical inspection is to be made of those disembarking at the principal points of call, where isolated quarters are to be kept ready for the provisional reception of cases of illness."

Pyridine in Asthma.—Pyridine is a base, analogous to the aniline bases, obtained by fractional distillation of the oily residue remaining after treating with caustic potash the substances absorbed from tobacco-smoke by a weak solution of sulphuric acid.

The Paris correspondent of the British Medical reports on its use as follows:

"M. Germain Sée, in a communication to the Académie des Sciences on pyridine, states that neither subcutaneous injections of pyridine salts, nor smoking cigarettes of pure pyridine, offered the same advantages in asthma as the practice of administering it by inhalation. Four or five grammes are poured onto a plate, which is placed in a closed room containing rather less than twenty-five cubic metres of air. The patient, in the room, breathes the air impregnated with pyridine. This treatment should be repeated, for about 20 minutes, three times a day. Pyridine can be traced in the urine almost immediately after the commencement of an inhalation. According to Dr. Germain Sée, hypodermic injection and pyridine cigarettes provoke nervous disturbance. Inhalation produces a beneficial effect; the feeling of oppression common among asthmatic patients being relieved, breathing becomes easier, and they have no longer the characteristic intense longing for fresh air. The sensibility of the pneumogastric nerve and the excitability of the medulla are considerably diminished, and the heart's action becomes normal. It frequently happens that the patients fall asleep after the inhalations. This sleep is almost normal, and is not accompanied by profound insensibility, and is therefore different from that provoked by anesthetics. While it lasts, sensations, followed by reflex phenomena, are provoked with difficulty, although contractile energy is maintained. The administration of pyridine is not followed either by paralysis, convulsions or tremors; but the muscles are relaxed, and temporarily lose their tonicity, in consequence of the lessened sensibility of the medulla oblongata and spinal cord. The modification of reflex sensibility is the especial characteristic of pyridine, as distinguished

from substances like nicotine and atropine. All the patients to whom Dr. Sée administered pyridine had quiet nights, though previously tormented with violent fits of coughing and intense oppression. The physical pulmonary symptoms all showed improvement. Pyridine does not affect the general health. When the suffocating asthmatic fits reappear after inhalations for nine or ten days, Dr. Sée recommends the administration of iodides. He has treated fourteen patients, nine of whom were asthmatic, and five subject to cardiac disease; they were all relieved. One patient had suffered from asthma for twelve years; he was greatly relieved by the treatment with pyridine, but it was discontinued in consequence of troublesome attacks of vertigo and sickness. The asthmatic patients who presented cardiac and renal complications, declared that respiration was much eased by the inhalations. Dr. Sée concludes that pyridine is preferable to hypodermic injection of morphia, its action being preferable and less dangerous."

Missouri State Board of Health.—We refer to another column for a report of the proceedings of the newly organized State Board. The report shows that an earnest purpose actuates the body, and we feel confident that our people will be well advised and encouraged in sanitary work.

The International Medical Congress and the Medical Profession.—At a meeting held in the Medical Library Building, in Boston, on July 2, 1885, the following resolutions were unanimously adopted:

Whereas, We had been led to believe that the authority to organize and control the Ninth International Medical Congress had been permanently delegated by the American Medical Association to its original committee, thus providing against any radical changes in its published programme; and

Whereas, The American Medical Association has revised the action and annulled appointments of that committee in a way which we regard as detrimental to the interests of the medical profession of America and fatal to the success of the Congress; therefore be it

Resolved, that we, the undersigned, members of the medical profession in Boston and vicinity, concerned in the organization of the Ninth International Medical Congresss, decline to hold any office in said Congress as now organized. Robert Amory, G. M. Garland, H. P. Bowditch, R. T. Edes, J. J. Putnam, Francis Minot, J. R. Chadwick, C. F. Folsom, Hasket Derby, S. G. Webber, T. M. Rotch, T. Fillebrown, R. H. Fitz, Thomas Dwight, C. J. Blake, J. C. Warren, O. F. Wadsworth, S. J. Mixter, F. I. Knight, G. H. Lyman, Jacob L. Williams, H. W. Williams, H. P. Walcott, J. Orne Green, E. Wigglesworth, etc.

At Baltimore, Md., the following action took place:

Whereas, The new Committee on the Organization of the Ninth International Medical Congress, at its recent meeting, held in Chicago, made such changes in the arrangements for the Congress as, in our opinion, will mar its success, and will prove injurious to the interests of the medical profession, it is therefore

Resolved, That we, the undersigned, disapprove of the action of the committee, and decline to accept the positions to which we have been appointed under it. I. E. Atkinson, S. C. Chew, Julian J. Chisolm, Christopher Johnston, William Lee, John N. Mackenzie, Richard McSherry, F. T. Miles, Alan P. Smith, Samuel Theobald, L. McLane Tiffany, H. P. C. Wilson.

It is also stated that Drs. S. C. Busey, Swan Burnett and other Washington physicians, and Dr. Geo. J. Engelmann, of St. Louis, have withdrawn.

A New Test for Sugar in the Urine.—The British Medical Journal learns from Paris that M. Coignard, at a recent meeting of the Académie de Médecine, stated, on the authority of M. E. Gautrelet, hospital chemist, that the presence of urobilin and indicans in urine causes error when Fehling's fluid is used for estimating sugar. In order to accu-

rately estimate the quantity of glucose in urine, three operations are necessary; a chemical—the use of Fehling's fluid; a physical—polarisation; a physiological—fermentation by yeast. The chemical test is effected by a new method. To 50 centigrammes of urine add 10 centigrammes cube of subacetate of lead, then filter; to 10 cubic centigrammes of clear filtered solution add 20 drops of Fehling's solution, and the fluid becomes slightly blue. Then boil; and, if the fluid lose all color, indican is present, and discoloration persists when the fluid cools. If the blue color remain, urboline is present. and the color does not become more intense when the fluid cools. If the fluid lose or retain its color, but deepen by cooling, glucose is present.

CONTRIBUTION.

REPORT ON SURGERY TO THE ILLINOIS STATE MEDICAL SOCIETY.

BY WILLIAM A. BYRD, QUINCY, ILL.

Read at Springfield, Ills., Thursday, May 21, 1885.

I shall pay but a passing tribute to the literature of surgery and anatomy of the past year, but must call the attention of the society to the superb plates and text of Dalton on the Topographical Anatomy of the Brain, Treves work on Intestinal Obstruction, and the book of Hughe Owen Thomas, of Liverpool, upon Intestinal Disease and Obstruction, a work that I think should not only be read but carefully studied by every man practicing general medicine and surgery. Perhaps the majority of the profession would not agree with the author, but there are few indeed that would not learn much of value. The International Encyclopedia of Surgery has progressed slowly but very satisfactorily. Reeves on Deformity will be of real advantage to the general practitioner and prove of value to many orthopedic surgeons. The little work of Dr. John B. Roberts on Surgical Delusions and Follies is worthy careful reading. Van Buren's Principles of Surgery has much to commend it, as has Walter Pye's Surgical Handicraft. Then we have revised editions, not in name only, of Hamilton's Fractures and Dislocations, Bryant's and Erichsen's systematic works on surgery.

Taking special subjects, the extirpation of the thyroid gland was being carried on to a considerable extent in Europe of late years, but Kocher published a paper upon the subject of thyroidectomy in 1883 in which he brought forward the evil resultant effects upon the system. This paper caused many experiments to be made upon animals to settle the disputed points. Zesas was one of the most careful of the experimenters and he found that thyroidectomy in animals was soon followed by a general morbid condition. Among the signs may be mentioned somnolency, unsteady gait, and other muscular and nervous difficulties; and from these experiments he holds that thyroidectomy is an unjustifiable operation since the regulation of the cerebral circulation is one of the physiological functions ofthis body. Be that as it may I have only removed the thyroid gland once, three or four years ago, from a lovely child about four years of age. She did well for a few months and then dwindled and died. Whether this was from the effects resulting from the loss of the gland I am unable to state.

The value of such a work as Dalton's Topographical Anatomy of the Brain is made apparent when we see Drs. Lee and Fenger of Chicago opening an abscess of that organ, and Mr. Rickman J. Godlee of London upon the advice of Dr. Hughes Bennett cutting down upon a glioma the size of a walnut and removing it. Operative procedures for the cure of epilepsy and insanity are becoming more common and I believe more successful. The failure, in some instances, in effecting a cure, being, perhaps, due to not removing enough of the irritating bone as suggested by Dr. W. T. Briggs, of Nashville. The hope for the future of surgery of the brain was never brighter.

Abdominal surgery is still advancing. Dr. Wm. T. Bull, of New York, cuts down upon intestine injured by a pistol shot, resects the injured portions, unites the ends, and the patient makes a happy recovery. Dr. Andrews of Chicago had twocases of gunshot wound of the abdomen with injury of the intestine that ended happily; in one case the stomach was empty and in the other it was full of beer. This leaves us in the sad predicament of not knowing whether total abstinence is better or not if one is going to be shot in the abdomen. Both cases were treated with perfect rest and with opiates. Both recovered. Dr. Jos. Grindon, of St. Louis, reports a case of stab of the abdomen inflicting wounds upon the intestine, the patient recovering after two inches of intes-

tine were resected, the ends of bowel united and dropped in the abdomen. But these are enough cases of this sort to give a general insight into the progress being made in the treatment of wounds of the intestine.

Several cholecystotomies have been successfully made during the year, among them one by Dr. Chas. T. Parks,of Chicago. And one case of gallstones was seen by Dr.R.G.Bogue of Chicago, not operated upon; and the post-mortem revealed facts of interest in showing that the method of exploring the gall-bladder with an aspirator needle as first practicad by Drs. Whittaker and Ransohoff would have been futile as there were six gall stones the size of a filbert impacted in the common duct and they would have remained undiscovered. In such cases exploratory incision is the only method that offers hope.

In such a case removal of the stones and stitching together of the edges of the wound would have been about the only thing to be done, yet I must still believe that the edges of an opening made in the gall bladder for stones should be so stitched to the abdominal wound as to permit a free external flow of the bile, to prevent a recurrence of their formation while the patient is treated for the relief of the catarrhal condition of the bile ducts so common in such cases. The practice of stitching the edges of the opening of the gall bladder together and returning it to the abdomen may be done successfully as evidenced by a case operated upon not long since by Dr. A. C. Bernays of St. Louis.

I must not forget the ingenuous proposition of Dr. J. Mc T. Gaston of Alabama, Georgia, to make a fistulous communication between the gall bladder and intestine, thus allowing the bile to flow into the intestine and perform its functions. Even if there is closure of the mouth of the common duct the bile can flow around through the cystic duct and bladder into the intestine. But that the bile is not absolutely essential for life is proven by the case reported to the Mississppi Valley Medical Society last fall in this city by Dr. F. W. Beard of Vincennes, Ind., of a patient of his that had survived for years with the bile flowing from a fistula he had formed with his scalpel.

All surgeons admit that amputation at thehip-joint is one of the most formidable that they are called upon to perform, not alone from the extensive surface laid bare and the shock, but from hemorrhage and evils resulting from means employed to control the hemorrhage. When the abdominal tourniquet is employed, the intestine may be so bruised as to cause enteritis, perforation, peritonitis and death. Davy's lever even in his own hands has so wounded the bowel as to cause death, while introduction of the entire hand into the rectum frequently causes laceration of the colon. To obviate this Lloyd of Manchester adopted a method of passing a stout India-rubber tube around the hip allowing the ends to cross above Poupart's ligament, under the point of crossing a compress was placed so as to bear on the artery above the ligament. The ends of the tube were then entrusted to assistants. This method was tried successfully by Dr. Wheaton of St. Paul. The objection to it is that it is tiresome to the assistants, and brings more persons than are necessary around the operating table to be in the way of the operator. The latter objection applies equally to some of the methods mentioned above To obviate these defects, I have devised the method of applying a figure of eight of a three quarter inch French elastic tubing around the affected hip and opposite side of the body. Where the tubing passes in front, to go under the perineum, of the affected side, it should come on the front side of the anterior superior spinous process of the ileum, and go below the process when it crosses the body on the opposite side. Then to keep the transverse portion from rising and slacking over the lax tissues of the abdomen, tie a piece of bandage around the tube about the middle of the back and bring it forward over the perineum and tie down the front part of the tube. Then apply a three inch tightly rolled bandage, two inches thick over the course of the iliac artery, where the rubber crosses, and with heavy thread or twine stitch to it the V formed by the rubber. Retract the portion of the elastic band behind the affected limb with a piece of bandage passed around it and tied to the back cross rubber, drawing it tightly. This is done to prevent it slipping off when the limb is raised, or amputated. I have tried this method twice within the last year, and know nothing that could be more satisfactory. In one case, a patient at Hannibal Mo., on September 24, 1884, I amputated at the hip-joint for osteo-sarcoma of the femur. The patient was a large man and had had the femur amputated at lower third for sarcoma at the knee over a year before. The disease had returned and was giving him great pain. As a last hope and for the relief of his suffering I amputated at the hip-joint controling the hemorrhage as indicated above. Of course there was a good deal of blood in the limb; after the amputation there was not over six or eight ounces of blood upon the

floor and in the vessel that was used to catch it. The vessels were twisted and he was in bed in fifty minutes from the time he was taken from it to the table. The other case was one where the man sustained a compound fracture of the femur, from falling from the top of a moving rail-road car to the bottom of a ravine, the distance being abont thirty feet; this was April 4, 1885. The shock was so great that he was not fit for amputation until April 8, by which time there were symptoms of acute osteo-myelitis. Amputation as above was performed, and he died the morning of April 12, not from the amputated limb, but from septic trouble causing phlegmonous inflammation in the opposite limb. He did well for two days after the amputation, and it seemed as though he would surely recover, until the swelling commenced in the opposite limb. Of course I did not put an Esmarch's bandage on so badly decomposed a leg; the limb was elevated instead. There was not half an ounce of blood lost. By this method, I not only controlled the bleeding from the femoral, but also from the gluteal and obturator arteries.

I have purposely mentioned that I twisted the vessels because I am firmly convinced that it is a much safer method of treatment than the ligature on all large vessels, I twisted these femorals as they emerged from under Poupart's ligament, and would have been perfectly satisfied to have twisted the common iliac or aorta should ever any possibility require it. Should a ligature be applied to an atheromatous artery, the vessel would give way and there would be secondary hemorrhage. It should be treated by some one of the methods of acupressure. How long should a vessel be twisted? Until the elasticity of its coats gives way. Take a leather tube that has no elasticity and bend it, in a twist, sharply upon itself once and try to force water through it and you will find it will burst above the point where the twist is before the twist will give way. So the artery will do the same so soon as its elasticity is destroyed. What instruments must be used? One good solid jewel pair of forceps that will not wabble while twisting, such as the Golding Bird slide, or the Lawson Tait ring handled forceps. The objection to using two forceps is that the vessel is apt to be torn across to some extent near the jaw of the forcep that holds the vessel crossways. I have not ligated an artery of any size in nearly five years and I do not think I ever shall if my results continue in the future as good as in the past. I will mention an opertion in particular where I think twisting is indicated and that is in castration. There the whole cord should be caught across with a stout forceps and cut off an inch from the same. The hemorrhage is controlled and the vessels will protrude from the cut end of the cord most satisfactorily so that they may be picked up leisurely and twisted. In this instance the cross forceps do not harm, since the vessels are surrounded by a mass of tissue that prevents their tearing crossways. The cord is dropped and there is no fear of the agonizing pain, or even tetanus, that sometimes follows the catching up of some filament of nerve in the grasp of the ligature. There is not the long waiting for the ligature to come away, sometimes to be coaxed with little elastic straps fastened to limbs with sticking plaster.

Some years ago, not many, I read a translation from the German, by Dr. N. Senn, where the surgeon, I have forgotten his name, recommended the opening of the psoas abscess in the groin and passing up a probe or sound along the sinus until above the ileum and there making another opening down to the point of the sound, thus shortening the passage way of the pus and rendering recovery more rapid and certain. Mr. Treves, of London, has taken up the method and cuts down directly to the diseased vertebræ, but limits the operation to diseased lumbar vertebrae. I think this operation can be very readily and safely extended, so as to resect, if necessary, a portion of the rib, in case of caries of dorsal vertebrae. I had intended ever since reading Dr.Senn's tranlations practicing the procedure on suitable cases when they presented, but did not get an opportunity until April 10, 1885, when a patient, a man aged about thirty, presented at the hospital. He had Pott's disease involving the four lower dorsal vertebrae, with a resulting psoas abscess pointing under Poupart's ligament and nearly ready to burst. Under an anesthetic I opened the abscess at its most dependent point, and passed a solid tin probe, as large as a No. 15 American gauge catheter, up the sinus until I could feel the point of it just below the twelfth rib. Then I cut down upon it and fastened a drainage tube to the end of it and withdrew it, allowing the drainage tube to follow, and leaving it in the sinus, a length of fifteen inches. The sinus was washed out twice a day with a solution of boracic acid. In four days he left the hospital and returned to his home, in Mendon, Illinois, under the care of his family physician, Dr. L. F. Brown, who reports that he improved so rapidly that in two weeks he removed the tube and found little pieces of

bone in its openings. Since that time several pieces of bone, some half as large as a small finger nail, have presented at the upper opening. If the upper opening should be allowed to close too soon and he again presents for treatment I shall enlarge the upper opening and take out a portion of the ninth and tenth ribs near the vertebrae so as to get perfectly at the diseased structures. He has been selling pea-nuts at his stand since the operation. If I do not cure him I will have the satisfaction of having prolonged his life with less suffering and have given him his only chance for recovery.

Now, gentlemen, I have tried to give you a sketch of some of the progress of surgery. Had I gone into greater detail you would have been so wearied with the reading as to be sorry you ever put me on the committee to report on surgery.

CLINICAL LECTURE.

ERYSIPELAS COMPLICATED WITH BRIGHT'S DISEASE.—DEATH.—CANCER OF PANCREAS.—GASTRIC CANCER INVOLVING THE PANCREAS.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

BY WILLIAM PEPPER, M. D.,

Provost of, and Professor of the Theory and Practice of Medicine University of Pennsylvania.

REPORTED FOR THE REVIEW BY WILLIAM H. MORRISON, M. D.

Gentlemen, I shall in the first place exhibit some specimens which have considerable clinical and pathological interest, and which also show the importance of searching out all possible previous lesions in every case of acute disease. These specimens were removed from a young man with facial erysipelas, who was admitted to the hospital on the afternoon of the 20th, and died on the 22d. The erysipelas with which he was suffering was not of a severe type and he was thought to be convalescent. The history of the case is as follows: The patient was a painter by occupation and had suffered with lead colic some time ago. At the same time his feet and hands had been puffy and there was albumen in his urine. This, however, we did not know at the time. He had also used alcohol to excess. After considerable exposure to cold, he noticed, ten days ago, a burning pain in the face with slight swelling associated with nausea and vomiting. Soon the characteristic appearances of erysipelas presented themselves, affecting the cheek and nose and spreading to the lower part of the forehead. The temperature was 100° in the morning and 101° in the evening. The tongue was dry and somewhat coated and he complained of burning pain in the affected parts. He appeared to be in a favorable condition and, according to his own account, had been perfectly well until two days before. The urine, however, was examined and found loaded with albumen and containing tube casts. During the night of the 21st, he passed into a state of delirium, urinating unconsciously into the bed. His pulse and strength rapidly failed, the breathing became labored, delirium continued and the following morning he died. There was no great elevation of temperature to explain the development of these nervous symptoms.

The post-mortem examination was made twenty-four hours after death. The face was still swollen. The heart was covered with fat, but the muscle was solid and the walls of the ventricle of natural thickness. The heart was somewhat enlarged en masse. The edges of the mitral valve were slightly thickened. Large ante- and post-mortem clots filled the cardiac cavities. The apices of both lungs presented tuberculous formations and the right apex was solidified for the extent of two inches in diameter.

The liver weighed four and three-fourths pounds, was therefore considerably enlarged, pale and soft. It is in a state of extreme fatty degeneration with evidences of recent hepatitis. The gall bladder was nearly empty and its walls were thickened and congested. The kidneys weighed four ounces each and presented the lesions of chronic parenchymatous nephritis, with signs of an acute exacerbation. The pancreas weighed four ounces and contained a small sac, apparently the result of dilatation of a duct which contained a puriform liquid. The substance of the organ was in a state of chronic inflammation, dense and firm. The spleen was normal.

We have here the organs and they are worthy of careful examination from a pathological standpoint. In the lungs we find the condition described in the note of the autopsy. As can be readily seen, the lungs are deeply pigmented. This I presume is due to the presence of lead. In those who have been the subjects of chronic lead poisoning,

I have on several occasions taken the trouble to make extracts of the different viscera and obtained notable traces of lead.

Taking next the kidneys, we find that they are rather small. The cortex is a little wasted, but there is no advanced granular change. The surface of the organs is smooth and the capsule is readily separated. The kidneys are pale and anemic and the microscope shows signs of chronic catarrhal nephritis, and with these, the evidence of an acute attack grafted on the chronic condition.

The liver is much enlarged and is a typical drunkard's liver. It is pale, soft, friable aud anemic. The microscopical examination shows marked fatty change and the knife that cuts it is covered with grease as though it had passed through a mass of lard. There is also evidences of inflammatory changes in the liver structure, showing that there was an acute irritative process in addition to the older fatty degeneration.

Lastly, the pancreas presents marked changes. It is thick ana hard and on microscopical examination presents the appearances of chronic inflammation of the interstitial stroma, and in some places obstruction of the ducts, giving rise, to retention cysts, one of which is as large as a large pea, the contents of which had become puriform. Changes in the pancreas are doubtless very common, yet as the position of the organ so cuts it off from direct exploration, and as it pours its secretion into the intestine where it is mixed with the bile and intestinal fluids so that it cannot be studied separately, as can the urine, and as it contains no coloring principle as does the bile, so that when there is obstruction, the tissues become stained, on account of these anatomical and physiological reasons, lesions of the pancreas go unsuspected more frequently than lesions of any other organ in the body. Doubtless, in many cases such conditions play an important part in hastening the downfall of the patient. It was unquestionably so in this case. The secretion of this pancreas must have been unhealthy, and therefore the digestion of starchy matters has been imperfect. It may be that the fatty degeneration of the liver was in part attributable to the lesions in the pancreas and that the change in the pancreas which was unsuspected and now appears to be so slight was even more serious than the changes in the liver itself. In addition to the cirrhosis there is cystic degeneration of the organ; the latter is the most common lesion that we find affecting the pancreas. The duct of the pancreas is tortuous and may readily become obstructed either from inflammation of its lining membrane or from compression from contraction of the interstitial tissue. This leads to damming up of the secretion and cystic dilatation of the main duct or of some of the branches. These cysts usually contain a turbid milky fluid, but sometimes, as here, inflammation has ensued and the contents become puriform. Another consequence is the formation of calculi. Sometimes these calculi will reach a considerable size. They are white or gray in color and are usually cylindrical in shape and at times they are branched. It is probably rare that they escape, but I have known small ones to escape into the intestine, their passage being associated with obscure tenderness, violent, deep-seated pain in the epigastrium, without jaundice.

The spleen is about the only healthy organ in this individual. It is soft, of normal size and its pulp is apparently healthy.

The acute erysipelas may have been the exciting cause of the attack of acute catarrhal nephritis. Many cases of erysipelas are complicated with acute catarrhal nephritis. This is particularly apt to be the case in those instances where there is delirium, the patient presenting a typhoid condition. This is a serious complication. Our prognosis in many cases of erysipelas, both medical and surgical, is largely determined by the question whether or not the patient has healthy kidneys. It is essential to study the urine in every case. Just as no physician should undertake the treatment of a case without studying the urine, so no surgeon should operate on any patient without previous examination of the urine.

Cancer of Pancreas.

The patient from whom these specimens were removed was seen in consultation several months ago. The patient, a German, was fifty years of age, married but without children. His family history was unknown. He was a moderate drinker. When I first saw him he had been ill about three months. For several years he had been subject to rheumatic pains about the limbs and back, but otherwise had been healthy. The first symptom of his illness was a deep-seated pain about the back which he regarded as of a rheumatic nature. He soon began to have in addition deep-seated abdominal pains situated in front of the spine. He then began to run down in flesh and strength and to lose color, and then consulted a physician. Various prescriptions failed to give relief. The progressive failure of strength, flesh and color continued. The pains before mentioned in-

creased in severity and finally required for their relief hypodermic injections of morphia. The abdomen then began to gradually enlarge and it was soon evident that ascites was present. It was at this time that I first saw him. The man was then suffering excessively from pain and was unable to lie in any comfortable position. He was suffering more in the spine than at any other point. Deep-seated pain was also complained of in the abdomen below the epigastrium. This did not extend below the umbilicus. As I have said, he was haggard, anemic and pale and had lost a great deal of flesh. There was no jaundice, the bowels were kept quiet and torpid from the use of morphia. He had no appetite, there was no vomiting and the urine was normal. The belly was distended with liquid, but not sufficient to cause great distress.

Under such circumstances we should expect to find one of two conditions; either chronic peritonitis or a deep-seated abdominal tumor. Lesions of the spleen were excluded for that organ was not changed. Lesions of the kidney were excluded by examination of the urine. Affection of the liver was excluded by the facts that the organ was not enlarged, the absence of jaundice and the pain was not hepatic in its location and in its radiation. There had been no attacks indicative of the passage of gall stones. Therefore, as I have said, the occurrence of this pain and gradually developing effusion in the peritoneal sac could only be explained by a circumscribed peritonitis of the upper portion of the abdomen or by a deep-seated abdominal tumor.

There had been no cause for chronic peritonitis, there was no fever, and there wasno affection of the lungs. There had been no traumatism and the age was against the idea of tubercular peritonitis. It was therefore concluded that if he had peritonitis at all, it must be a cancerous peritonitis. To aid in the diagnosis a hypodermic needle was introduced and a portion of the effusion withdrawn. The fluid was not true ascitic liquid, but was turbid and under the microscope showed a few red globules and numerous pus corpuscles and contained a large amount of albumen, showing that evidently there was an irritative action of the peritoneum. The diagnosis arrived at was either cancerous peritonitis or deep seated cancer in the region of the pancreas.

The stools were carefully studied for the presence of undigested fat, and definite amounts of sweet oil were given and the amount of fat discharged with the stools studied. The result seemed to be that there were no fatty stools. When he took fat in ordinary amounts in the form of cream and butter, there were no fatty stools. When he took a small quantity of sweet oil, a teaspoonful, there was no unusual quantity of fat discharged. Still the absence of fatty stools is not to be taken as a strong evidence against the existence of pancreatic disease. On the other hand, the presence of fat in the stools is a strong proof in favor of pancreatic disease.

The man's sufferings were unappeasable except by rapidly increasing the dose of morphia, and in a short time he died.

At the autopsy a curious fact was noted, and that was that, although there was great emaciation of the body generally, there was a large amount of fat in the omentum. The head of the pancreas was the seat of a tumor which examination proves to be a carcinoma. It is oval in outline and about two inches in diameter. The duct of the pancreas was not obstructed and the bile duct had not been involved, as often happens in cancer of the pancreas; nor did this growth, as cancer of the pancreas sometimes does, involve the greater curvature of the stomach, thus causing vomiting. This was a case of uncomplicated cancer of the pancreas. In this case the tumor could not be detected on palpation on account of the distention of the abdomen, and although on one occasion three quarts of the turbid liquid had been removed, the tumor was so small and the amount of liquid still remaining so considerable, that it was impossible to detect the mass by palpation.

Cancer of Stomach Involving the Pancreas.

I have next a specimen of cancer of the stomach involving the pancreas which was removed a few days ago. In this case there was no difficulty whatever in the diagnosis at any time. The patient was an elderly woman about seventy years of age. She began to suffer with deep seated pains in the epigastric region and with vomiting. This increased in frequency. There was progressive emaciation, weakness and cachectic appearance. She had been sick for some time before I saw her and I had no difficulty in finding a tumor to the right of the median line in the position of the pylorus. This was hard, somewhat immovable and irregular. It was not very tender on pressure. Under a suitable liquid diet and an anodyne suppository of opium the vomiting entirely ceased and the patient was quite comfortable for the remainder of her life, scarcely vomiting once during

the two months preceding her death. This relief was, however, not attended with any improvement in the general condition. The anemia, weakness and cachexia became more pronounced and the tumor became more distinct.

The post mortem examination showed the pylorus to be thickened and an ulcer two and a half inches in diameter with livid, everted edges extending toward the lesser curvature. The liver was not involved. Microscopical examination showed the ulcer to be the seat of cylindrical epipthelioma.

Here are the organs. The pylorus is slightly thickened but not absolutely obstructed. The walls of the stomach are very thin and soft, but we must bear in mind that this thinness and softness may be the result of self-digestion. As soon as life ceases, the walls of the stomach become the seat of digestive action of the gastric juices that may be in the organ.

As I have said, the pylorus was not absolutely obstructed. The abruptness of the cessation of the vomiting made me suspect that the improvement was not dependent on the change in diet, but that it was due to the fact that an obstructed pylorus had been opened by the formation of an ulcer; occasionally you will find uncontrollable vomiting suddenly succeeded by retentiveness and sometimes by diarrhea, the pyloric orifice having become patulous and insufficient. In the present case a tendency to diarrhea appeared after the cessation of vomiting. There was enlargement of the glands along the lesser curvature and hardened feces in the duodenum. When these were taken together they made a mass of considerable size in this region. The great thinness of the abdominal walls was, however, the chief factor in the ease with which this tumor was recognized. In the case of cancer of pancreas it was impossible to detect the presence of the tumor on account of the amount of fat in the omentum.

These specimens have illustrated so many interesting and important points that I have devoted the whole lecture to their consideration.

SOCIETY PROCEEDINGS.

MISSOURI STATE BOARD OF HEALTH.

OFFICIAL REPORT.

The State Board of Health met at Jefferson City, the State Capital, July 2, 1885, in response to a call from the Governor. The meeting was held at the Executive Department, at 3 P. M., all the members being present.

The membership of the State Board of Health, as at present constituted, is as follows:

Dr. Albert Merrell, St. Louis, eclectic; appointed September 1, 1883; term expires July 2, 1887.

Dr. George Homan, St. Louis; appointed July 2, 1885, vice Dr. Gregory, resigned; term expires July 2, 1887.

Dr. Jefferson D. Griffith, Kansas City; appointed July 2, 1885, vice Dr. Hereford, resigned; term expires July 2, 1887.

Dr. G. A. Goben, Kirksville.

Dr. George M. Cox, Springfield; homeopath.

Maj. William Gentry, Sedalia; farmer and stockman.

Mr. James B. Prather, Maryville; farmer and stockman.

The four last named were appointed July 2, 1885, and their terms expire July 2, 1892.

ORGANIZATION AND COMMITTEES.

A reorganization was effected by the election of Maj. Wm. Gentry, President, Dr. Geo. Homan, Secretary, and J. B. Prather, Treasurer. Dr. Merrell was continued in the office of Vice President, he being the only member holding over.

Dr. Hearne, the retiring Secretary, appeared before the board by request, and made a statement regarding the financial operations of the old board. After some discussion an Auditing Committee, composed of Drs. Griffith and Homan and Mr. Prather, was appointed to go over the books and verify the statements and accounts presented.

An Executive Committee was created, composed of the President, Vice President and Secretary. The President was empowered to appoint various committees, on recommendation of the Executive Committee, to take up, investigate and report to the board upon matters affecting the health or well-being of the people and the live-stock interests of the State. Dr. Griffith was requested to prepare a report upon the recent occurrence of dysentery, in almost epidemic form, at Kansas City, as a probable result of the use by families of ice taken from near the outlets of sewers.

By invitation Prof. Sanborn, Dean of the Agricultural College, and Dr. Paul Paquin, State Veterinarian, appeared before the board and made statements regarding the present condition and prospects of live-stock interests in different parts of the State.

By resolution Maj. Gentry and Mr. Prather were appointed a committee to prepare a report on this subject, in conjunction with Prof. Sanborn and Dr. Paquin, the same to be submitted to the board at the earliest possible date, and to be followed by additional data and information from time to time, as the committee may deem necessary.

MATTERS DISCUSSED.

The matters of drainage and sanitary measures in towns, and the control and supervision of nuisances generally throughout the State, were discussed, and the question of how the formation of local boards of health could be best encouraged and promoted was considered. It was deemed important that the aid and co-operation of the Superintendent of Public Instruction be invited, in order to know the condition of school houses and school premises. The efficacy of railway stations, yards, etc., as a means of spreading disease was suggested. It was thought advisable to co-operate in this direction with the State Board of Railroad Commissioners.

Other subjects discussed were the collection of mortuary statistics, the registration of births, and the proper sources of pure vaccine supplies in the event of an outbreak of small-pox.

The registration of physicians under the existing law will be continued, and the question of the feasibility of issuing a complete State registry was referred to the Executive Committee.

The session was adjourned at 6 P. M. in order to accept the Governor's tendered hospitality, and was resumed in the evening, when, after providing for proper representation at the conference of State Boards of Health, to be held at Washington next fall, in connection with the meeting of the American Public Health Association, the board adjourned to meet at the same place, subject to the call of the President, on the second Tuesday in next October.

Although the Legislature at the last session failed to provide for the continued financial support of this body, the Governor and other State officials say they are earnestly desirous of its continuance, and have pledged themselves to use their influence with the next Assembly to provide for the deficiencies created by the failure of appropriation by the last one.

CIRCULAR NO. 1.

Office of the State Board of Health,
St. Louis, July 11.

To the People of Missouri:

By authority of a resolution adopted by the Missouri State board of health at a meeting held in Jefferson City on July 2, empowering the president, on the recommendation of the executive committee, to appoint committees to take up, investigate and report to the board upon various matters concerning the general health, I hereby announce the following list of subjects to be so considered together with the names of members constituting the several committees, to-wit:

Prevailing Diseases Among Live Stock in Missouri; also Condition and Care of Stock-Yards, Cars, etc., at Points of Concentration or Distribution. Committee: Messrs. Gentry and Prather.

The Influential Factors in the Causation of Endemic or Local Epidemic Diseases. Committee: Dr. Griffith and Dr. Homan.

The Sources, Quality, Means of Distribution Etc., of Public Water Supplies in Missouri. Committee: Dr. Merrell and Dr. Cox.

The Sanitary Care of Railway and River Transportation Lines, Including Depots, Landings, Stations, Wharfboats, Roundhouses, and Passenger and Sleeping Coaches. Committee: Dr. Homan and Mr. Gentry.

Domestic and General Sanitation in Towns, Villages and Country Homes. Committee: Dr. Goben and Dr. Griffith.

The Condition of Asylums, Poorhouses, Jails, Workhouses and Other Charitable or Penal Institutions, with Reference to the Health of the Inmates. Committee: Mr. Prather and Dr. Merrell.

The Hygienic Care of the School Population and of Public School Buildings and Premises. Committee: Dr. Cox and Dr. Goben.

It is expected that the chairmen of the several committees will submit statements of progress made from time to time, as information accumulates, and they will be prepared to make final reports by October 1, 1886, which shall concisely embody all material facts and valuable data gathered in the course of the inquiry. It is particularly requested that the people throughout the state, the public press, stock raisers and dealers, veterinarian physicians, railroad officials, sanitarians, educators, clergymen, town and county officials and all other persons interested in promoting public good health, will aid the board to the full extent of their power and co-operate with the several committees as given above in every possible way.

In order that the state board of health may receive prompt and effective support and co-operation, and in view of the continually impending menace of a cholera visitation, it is respectfully requested and urged upon citi-

zens of counties and towns that they promptly meet and organize county and town boards of health for their own safety and protection. A simple and feasible plan for such an organization in counties where none exist is for the presiding justice of the county court to be made its president, the county clerk its secretary, with three reputable physicians added, one of whom may be officially designated as health officer, and whose powers and duties shall be clearly defined and specified. When such an organization is effected, it is respectfully requested that prompt notice of the same be sent to this board.

In anticipation of the publication of the official registry of physicians, surgeons and midwives of Missouri, which matter was referred to the Executive Committee by the Board—the work to be undertaken so soon as it may be found practical to do so—it is respectfully urged upon all practitioners of medicine, etc., who may be entitled to register under the existing law, but who have failed or neglected to do so, to send their names to the secretary at an early date, in order that the list may be as full and accurate as possible, as well as to secure to themselves the legitimate benefit of publication in the said official registry.

By the Executive Committee.

Wm. Gentry, President.

Geo. Homan, M. D., Secretary.

CHICAGO MEDICAL SOCIETY.

REPORTED OFFICIALLY FOR THE REVIEW.

Stated Meeting, July 6, 1885. The First Vice-President, C. W. Purdy, M. D., in the Chair.

Dr. R. Tilley exhibited to the Society microscopical specimens of the fungus aspergillus glaucus, taken from the human ear, an osteoma developed from the crusta petrosa of a canine tooth, and filaments, or mycelia, from the body of a tonsil.

While exhibiting the specimens, Dr. Tilley spoke as follows:

In describing to you the three specimens which are exhibited under the microscope, I will refer in the first place to the fungus—aspergillus glaucus—taken from the human ear. I have had this in my possession for about three years and have shown it to several of my acquaintances, but did not deem it of sufficient interest to exhibit it before. It is, however, an object which many have not seen before, although it is mentioned in every text-book on the subject. I have no intention whatever of entering into the question of aspergilli in general relative to their influence when found in the ear. But I must say that my experience relative to the question leads me to think that its influence as a source of pain in the external ear is greatly exaggerated in the books. This specimen was taken from the posterior wall of the meatus of a little girl who had for sometime previously been afflicted with otorrhea. The otorrhea had, however, ceased and the fungi were readily recognized in lusty growth immediately on looking into the ear. There was, however, no pain complained of, the patient was brought rather for inspection than for the expectation of relief. You will observe that the fungi are growing on what by simple inspection might be called dried but otherwise normal wax. You will notice that the fungus consists of one straight long stem surmounted by a round ball, very much like the top of an onion which has run to seed. It is commonly said, I think rather on theory than on observation, that they are caused by sleeping in low, damp apartments. The child from whom this was taken belonged to people in good circumstances and was well taken care of and was not living in damp quarters.

The next specimen, to which I will now refer, is the osteoma developed from the cementum or crusta petrosa of a canine tooth. I am very sorry that I cannot give you anything of the clinical history, because I believe it would be interesting, if known. In consequence of this, it is perhaps necessary that I should give a word of explanation as to how it came into my hands: A friend was speaking to me of some one who had been subjected to the operation of drilling through the fangs of six teeth on account of what was called "ossification of the nerve." In speaking to one of my acquaintances among the dentists about such a condition, I was presented with a tooth a section of which I exhibit to you. You will see, both macroscopically as well as microscopically, that the line of demarcation is well defined. You will further see that the general appearance of the tumor is that of bone, and that it differs greatly from the general appearance of the tooth proper. It is interesting to observe moreover that the canal, through which the nerve and vessels enter is greatly diminished in its course through the tumor, consequently great pressure must have been exerted on the nerve. Before making the section, I had supposed that the canal was completely obliterated, so small is its opening at the end of the tumor. On looking at the specimen

through the microscope, you will see very clearly that while the line of demarcation between the dentine and the proliferation of the crusta petrosa is well marked, and the lacunæ and canaliculæ of the bony structure of the tumor are well demonstrated, there are also a number of contorted tubules in the bony tumor which resemble, somewhat, the dental tubules. Haversian canals are of course not present, they never are in such growths.

Although I have no clinical history to present, I may add that the usual clinical history is one of severe pain, which nothing but extraction seems capable of relieving. The last specimen is one which I obtained from one of those little pockets which are often found in the tonsils. They seem to come and go, sometimes without giving any more inconvenience than a little discomfort. They are frequently associated with fetid breath, and in some cases the masses themselves are very offensive in odor. In the present case, however, this was not so, there was no fetor. There was, however, an unpleasant sensation amounting to a positive discomfort running down the neck externally, in the direction of the sterno-cleido-mastoid muscle. On pressure around the base, the little mass popped out suddenly, so that it came near going down the patients' throat. In examining it, under the microscope, it proved to be one mass of filaments, very fine and containing spores in the body of the filaments, and associated with fat crystals.

I succeeded in staining them with methyl violet, but only after first extracting the fat with ether.

I have no theory to present, gentlemen. I simply exhibit to you what has been interesting to me. After the removal of the small mass I did not think any treatment was necessary, but as there was a little bridge of tissue more or less dividing the cavity into two sections, I divided the bridge with the electro-cautery.

The Treatment of Acute Coryza was the subject of a paper by Dr. J. A. Robinson. He said the literature on the subject of the treatment of acute coryza is scanty and of a stereotyped nature. The profession seems to have arrived at two conclusions, first, that it is not a disease of sufficient severity and importance to command especial attention; second, that no plan of abortive or curative treatment has been sufficiently successful to cause them to investigate the subject further. However, in view of the fact that repeated attacks of acute coryza undoubtedly have a causal relation to pathological changes in the nares which it is difficult to remove, and that we are so frequently consulted by public speakers and singers who beseech us to abort or rapidly cure such attacks, it certainly deserves more than a passing notice.

The time-honored plan of aborting an acute coryza by the administration of a full dose of opium, an active purge and a potent diaphoretic has proven more disagreeable than efficacious. The plan advocated by Dr. Ferrier of blowing into the anterior nares a powder composed of morphia, bismuth and acacia, has been quite satisfactory in a few instances, but it is not free from the objection that, when successful, it often produces an unpleasant nausea. Its success is undoubtedly due to the sedative and astringent effect upon the inflamed mucous membrane.

What are the pathological conditions in the first stage of acute coryza? Briefly, there is dilatation of the capillary vessels, the arterioles being dilated and the venules engorged, inducing tumefaction of the mucous membrane. This is accompanied by dryness and pain. Secretion is abolished. In reflecting upon these circumstances the thought naturally arises, whether, if we can employ such measures or drugs as will antagonize these abnormal states, we will succeed in aborting the disease. We have recently had added to our armamentarium a drug which more completely antagonizes in its physiological actions these pathological conditions than any other. It is the hydrochlorate of cocaine.

Its physiological actions have been demonstrated to be concisely as follows: When applied to a mucous membrane it is a potent although transient anesthetic, a vaso-motor constrictor causing contraction of the arterioles and depletion of the venules, thus rapidly emptying congested tissues of a surplus of blood. This drug is also an astringent and has the property of lessening the secretion of muciparous glands. On studying the relation between the state of the nasal mucous membrane in the first stage of acute inflammation and after an application of cocaine, the theory was formulated that cocaine should prove useful in aborting acute coryza, and it was determined to try it on the first opportunity.

The details of the first experiment are as follows:

Miss S——, a soprano singer in one of our city churches, applied to me on the morning of February 22, and desired immediate relief from a "cold in the head." She complained that the previous night she had been exposed to a draft and awoke that morning with the cold, as evidenced by the fact that

she could not breathe through the nose, and that her nose felt dry and painful, and she had lost the sense of smell. Inasmuch as she had to sing that night at a special service, she must have immediate relief.

Upon examination I found all the conditions incident to the incipiency of an acute coryza. Her temperature was 102° F. with some acceleration of the pulse.

Febrifuges and a mild diaphoretic were prescribed. A local application of a four per cent solution of hydrochlorate of cocaine was applied, as thoroughly as possible, to the congested mucous membrane, and the parts were sprayed, also, for some time with a warm alkaline spray, hoping thereby to reduce the hyperemia. After having made another application of the cocaine, the patient was instructed to return home and follow the same line of treatment and to return the following day. She did not return until three days later, when she reported, to my surprise and gratification, that she had been able to sing as desired, and that no symptoms of the disease had returned.

The success which attended this new departure induced me to try it in other cases of acute coryza which were seen early,and it has almost always been successful. Of course the number of cases which we see in their forming stage are few on account of the fact that the patients do not seek medical advice for this affection until the disease is well advanced.

In the use of cocaine for the purpose of aborting an acute coryza there are some objections: It has to be applied often in order to maintain its action on the inflamed mucous membrane, and it is an expensive drug. I have found that the use of a warm alkaline spray serves to prolong the sedative action of the cocaine.

Of course dependence is not to be placed on local measures alone, but in addition proper attention is given to constitutional and hygienic treatment.

Dr. Tilley said he had used the hydrochlorate of cocaine in two or three cases of acute coryza with much satisfaction. According to one patient, an attack had ended with a single application. While he did not look upon cocaine as a sure cure for acute coryza, he thought it almost always did good. He referred to a serious accident which occurred to one of his patients during the use of cocaine. The patient was a boy aged 12 years, in whose nose a little cocaine had been used. After the first application he suffered a little nausea, which was not regarded as serious; after the second application the nausea was worse, but it was not until a third application had been made that the symptoms became alarming. These symptoms were difficulty of breathing, syncope, irregular action of the heart, cold perspiration and loss of sensation in the extremities. Notwithstanding these symptoms were alarming, the boy recovered quite rapidly. He had noticed reports of cases in the journals where the same symptoms had appeared.

Dr. Weller said that he had had a good deal of experience in the use of coca, especially in the form of the fluid extract. He had taken large doses, in his own case he had used two pounds in a short time. Formerly he had considered it as harmless as tea, but lately he had arrived at the conclusion that it is a powerful narcotic. The strange phenomena which follow use of cocaine in some cases, he believes to be due to the narcotic action of the drug, and that they would not appear if the drug was not given in large doses. He believed some patients to be peculiarly susceptible to the action of coca or cocaine, similar to the idiosyncrasies of patients in the use of belladonna, opium and alcohol. In the case mentioned, he believed the symptoms to have been the result of an overdose of cocaine. In his experience, he had found a 2 per cent solution of cocaine strong enough, and urged the tentative use of the drug in the same manner as in the use of morphia.

Dr. Webster did not wish to be considered skeptical, but he had some doubt as to the alarming symptoms in the cases mentioned having been due to the drug. It is not possible they were the result of reflex processes in over-sensitive patients? He had a patient recently who vomited after holding a fever thermometer under her tongue.

Dr. Paoli believed that the old treatment of acute coryza by giving the patient a hot bath, muriate of ammonia internally, and inhalations of camphor in hot water, or the oil of eucalyptus combined with borax, to be the best, although he would acknowledge that cocaine would often relieve severe attacks in a short time.

Dr. S. J. Jones asked the author of the paper if he had used cocaine with a steam atomizer in acute pharyngitis, tonsilitis and laryngitis; also, if the applications of cocaine to different patients were from the same solutions and at brief intervals, so as to be able to state how a reliable solution acted on different patients.

Dr. Robinson, in closing the discussion, said he did not advocate the plan of treatment as infallible or free from objections,

nor did he neglect to use other means of cure if he thought they were advisable. As to the effect of cocaine on certain patients, he had a similar experience to Dr. Tilley in the case of a woman who had twice been operated on without cocaine for nasal polyps. No unfavorable symptoms occurred during these operations. At the third and fourth operations cocaine was used and the patient was troubled with nausea, vomiting, palpitation of the heart and syncope. As no cocaine had been used in the first two operations, these symptoms in the third and fourth operations seemed to be, undoubtedly, due to an idiosyncrasy of the patient. He had not used cocaine with the steam atomizer, but he thought it feasible, if the drug were not so expensive. He prepared fresh solutions for each patient so as to preclude all possibility of failure of action by reason of deterioration of the solution by age. He had found the same package of cocaine to vary in its local and constitutional effect on different patients, affecting some more rapidly and profoundly than others.

Society then adjourned.

CORRESPONDENCE.

LONDON LETTER.

LONDON, JUNE 27, 1885.

Editor Review.—Since my last letter the General Medical Council have held a meeting, I was going to say their annual meeting, which would have been quite true of them a year or so ago, but last year they for reasons best known to themselves held two meetings and it is announced that they will do the same again this year. The session this time lasted eleven days, but there was very little business done all the same.

The first thing the Council had to do was to retreat from a position it had taken up in the previous session in reference to the Universities of Oxford and Cambridge. On the former occasion, it had decided to insist upon a definite examination in English as a part of the medical student's curriculum although duly warned that no such examination was held either at Oxford or Cambridge and that it was not at all likely that those bodies would either of them institute one to please so irresponsible a body as the General Medical Council. The prophecy came true; in the most polite way in the world the Universities expressed their intention of continuing to conduct their examinations in general education in the way they considered best, and the Council rescinded its former resolution. The amount of time spent in discussing whether they should attempt to coerce the Universities into holding an examination in dictation during this and the previous session would I suppose represent something like 200 guineas cost the profession.

The great business before the Council this session was the revision of the professional curriculum, which some member had had the happy inspiration to suggest at the previous session. From their own point of view the Council were evidently engaged on a work the importance of which it was impossible to overestimate, in the opinion of everybody else, they were, merely for the sake of doing something, engaged on a most mischievous undertaking and one which could only result in utter waste of time. The result has fully shown the correctness of the latter hypothesis. Many hours were spent is discussing whether the age at which a man is admitted to practice should be altered, whether a preliminary scientific examination should be insisted upon, and as to what should be the length of the curriculum. Fortunately for the profession and the general public the Council have no power whatever; they may talk as much as they like and pass resolutions to any extent, but no one is obliged to take any notice, and no one does take any notice. It is this feeling that after all it does not matter that induces the profession to allow the Council to go on year after year as it does. One would naturally suppose that the Council would endeavor to protect both the profession and the public, whereas it does the opposite, and its whole time has been devoted this session to a movement which if carried into effect would unquestionably have as its chief effect largely increased the number of unqualified practitioners; to prolong the curriculum as was resolved after a close division would mean to postpone the time when a man could commence earning his livelihood, this would deter parents from sending their sons into the Profession, and although it is quite true that in some departments the profession in this county is overstocked, yet the very large number of uncertified deaths every year testifies to the fact that a large number of unqualified practitioners are at work.

The recent change of ministry is not likely to make much diference to our profession. It settled the fate of the ministerial bill relating to lunacy reform, but in probability that would not have been passed anyhow; the Government had not shown much disposition to press it, and it would certainly have met with a good deal of opposition in both houses. As a result of its being withdrawn Lord Shaftesbury, one of the oldest peers in the country has expressed his willingness to resume his position of Chairman of the Lunacy Commissioners which he had held for fifty years but which he resigned on the introduc-

tion of the bill because he felt so strongly opposed to a clause in it relating to the signing of the certificate of lunacy by a magistrate. This is a point on which there has been a good deal of strong feeling in the profession. The alienists are practically opposed to it to a man, and it has only found favor with those who have little practical experience of the insane. At a meeting of the Medical-Psychological Association the subject was under discussion, when it was pointed out by more than one speaker that if the magistrate were to see the patient to judge for himself as to his insanity this would be constituting him an expert in lunacy and the doctor's certificate would be superfluous, whereas if the magistrate did not see the patient, but merely saw that all legal forms were complied with before signing he would occupy just the same position as the sheriff does in Scotland, and several speakers who had experience of the Scottish system considered the sheriff's intervention as a farce. For the present, at any rate rate, the subject has dropped and matters will remain in statu quo until after the general election in November when if the then Government feels strong enough it will doubtless endeavor to legislate on the subject. There is little doing now at the societies; with the exception of the Obstetrical and Ophthalmological they have all finished their labors for the session, to recommence next October with renewed vigor.

R. M.

ITEMS.

—The Treatment of Whooping Cough.—In his summary of treatment in a clinical lecture delivered at the Philadelphia Hospital ("Medical News"), Dr. John M. Keating emphasizes the value of the steam spray and the atomization of medicated solutions, among which he ascribes value to Dobell's solution, eucalyptol, and thymol. With the bichloride he advises caution Corrosive sublimate, which is now used for almost everything, he says, has also been applied here in the form of the spray. He remarks that it is a dangerous drug to put into the hands of an inexperienced person, and, as we have so many other useful remedies for this affection, he thinks it wise to avoid the use of corrosive sublimate. He has used listerine extensively with good results in the treatment of whooping cough. He employs it in the strength of one dram to two ounces of water, with an ordinary hand-atomizer, directs the nurse to apply it twelve or more times a day, and finds that little children, even babies, do not object to it. He adds to it tincture of belladonna, potassium carbonate, or ammonium bromide, as the case may demand. Chloride of ammonium he also finds of great service in the form of spray.—N. Y. Med. Jour.

Dramatis Personæ.—Gynecologist and patient, who had married a widower with several children, one of whom was in the waiting-room. Gynecologist, looking through the speculum—"How many children have you? Patient—"We have four in the family, doctor." "Ah! four children. That explains the condition of your cervix, madam. It was badly lacerated at your last confinement, and can only be relieved by trachelorrhaphy." "But, doctor, ain't you mistaken? I—" "Mistaken, Madam! Impossible. I tell you, you have laceration of the cervix, dating from your last confinement." "But, doctor—" "Now, madam, I know what is the matter with you, and it's no use for you to volunteer any further information. You must submit to an operation." "But, doctor, I will speak. I never had a child. The children we have are my husband's by a former marriage." Tableau.—Medical Age.

—The Supreme Courts of New York and Massachusetts have settled the matter as to who owns a medical prescription. The substance of the decision is, that the physician, in prescribing, gives the patient a written order for drugs, and their delivery terminates the operation. The druggist may, on his own responsibility, renew the drugs, for he is a merchant, and has a right to sell drugs in any shape. He is not bound to give a copy of the prescription, nor even to keep it, though he usually retains it as a protection in case of error on the part of doctors or patients.—Ther. Gazette.

—The Lancet (May 2) reports a uric acid calculus without any phosphatic incrustation, weighing fourteen ounces and measuring $4\frac{1}{2}$x$3\frac{1}{4}$x$2\frac{1}{3}$ inches, recently removed by Sir Henry Thompson by the high operation.

—M. Dujardin Beaumetz has been made an officer in the Legion of Honor.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, and U. S. Marine Hospital Service, for the two weeks ended June 27, 1885.

Long, W. H. Surgeon. Granted leave of absence for three days. June 18, 1885.

Fessenden, C.S.D., Surgeon. Leave of absence extended seven days on account of sickness, June, 24, 1885.

White J. H., Assistant Surgeon. Granted leave of absence for twenty-one days. June 23, 1885.

THE WEEKLY MEDICAL REVIEW.

MEDICINE AND SURGERY.

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GASTROSTOMY AS A MEANS OF CURE IN STRICTURE OF THE ESOPHAGUS.—The Centralblatt f. Chirurgie, XXV, 1885, abstracts from the Giornale della R. Accad. dé Med. di Torino, a report of an operation of gastrostomy to get at an impermeable esophageal stricture.

The patient, a boy five years old, had swallowed sulphuric acid five months before his admission to the Hospital of San Giovanni in Turin, service of Caponotto. He ate and drank with a good appetite but vomited everything a few minutes after, and consequently had become emaciated to a degree. The finest olive-pointed probe could not be passed into the stomach. On September 19, 1884, gastrostomy was performed. The abdomen was opened by an incision to the left of the linea alba, parallel to the costal arch. The peritoneum was united with the integument and a catgut continued suture, that caught only the serosa and muscularis, was made to fix the stomach to the wound. The whole was dressed with sublimated gauze and no trouble having ensued Caponotto incised the stomach on the fifth day. Nourishment was introduced then directly into the stomach. The boy improved rapidly. The next step was to dilate the stricture, and this was done by a combined method of dilatation by means of sounds introduced both through the fistula and the esophagus. One month after the operation the stricture had become so patent that the fistula was closed. This was done by detaching the stomach from the abdominal parietes, paring the edges of the fistula and union by a continued catgut suture. The abdominal wound was thereupon sewed up with catgut; a drainage tube was put in; this wound healed by second intention. The boy did well; a dilator was introduced but once a week and the patient went to his home.

In January 1885, he died of tuberculous meningitis. The autopsy showed that the stomach was slightly adherent to the abdominal wall; the incision had been made at about the middle of the anterior surface. The stricture had been situated about two cm. above the cardiac orifice,as was still shown by a white, circular cicatrix. Above the scar the esophagus was somewhat dilated and hypertrophic.

Caponotto believes this method the most feasible in strictures so low down.

HYPODERMIC INJECTIONS OF BLOOD.—In the Deutsches Archiv f. Klinische Medicin there is reported by v. Ziemssen a series of cases in which good results came from frequently repeated hypodermic injections of defibrinated human blood, 50 c.c. at each operation. Generally the amount (about 12 drams) was distributed by two points of injection. Antisepsis was carried out and the blood distributed in the meshes of the connective tissue by massage. No local inflammation, or fever, or hemoglobinuria ensued. The fact of the resorption was determined by the improved, general condition and by previous and subsequent spectroscopic analysis of the hemoglobin of the patient's own blood. After every injection the amount of hemoglobin rose to a maximum within the first twenty-four hours; gradually thereupon the proportionate amount became less again, but the final amount still remained higher than before the injection. Thus by successive hypodermic treatments a normal per cent of hemoglobin may be attained. v. Ziemssen recommends this perfectly harmless proceed-

ing in cases of dangerous anemia from various causes, also in leukemia, pseudoleukemia, poisoning by illuminating gas, carbonic oxide, etc.

Neuritis and Peripheral Paralysis after Hypodermic Injection of Ether.—The Centralblatt f. die Medicinischen Wissenschaften gives a summary of recent publications concerning this point. Ether is used hypodermically on the Continent and, we believe, of late to quite an extent amongst us, in conditions of collapse from shock, narcosis, in asphyxia, etc. Remack in No. 4 of the current year of the Berliner Klinische Wochenschrift relates a case of partial paralysis of the musculo-spiral in a woman, twenty-three years old, that had been treated with a number of ether injections while asphyxiated with carbonic oxide gas. The extensores digitorum communes et proprii and the abductor pollicis longus were paralyzed and showed degenerative reaction. Remack concluded that there was a paralysis of the ramus profundus nervi radialis, after it pierces the supinator brevis muscle. This localized mischief he deems due, not to the deleterious influence of the carbonic oxide, but to the injection and diffusion of the ether under the fascia antibrachii. He recollected a similar transient paresis following ether injections that were given in a case of chloroform-asphyxia.

In a discussion that ensued on this report Bardeleben stated that undoubtedly the ether caused the paresis and that the fault lay in the piercing of the fascia. Still it is a notorious fact that hypodermics of morphia are very often also administered in an unscientific and blameworthy manner and no such evil results ensue.

The explanation of the phenomenon is given by Arnozan, who in the Gazette Hebdomadaire, No. II, 1885, writes on "Neuritis Consequent Upon Ether Injection." He observed seven such cases and has established the fact experimentally that a neuritis causes the paresis or paralysis. The nerves affected were found in guinea-pigs to be in a state of parenchymatous inflammation. The motor and sensory fibres alike were implicated. Arnozan finds that superficial injections have no evil consequence; but deep injections, down under the fascia and into the muscles, were every time followed by severe changes. And in this observation lies a practical and applicable hint. All injections should be made into the subcutaneous areolar tissue and never should be made intra-muscular.

The lateral portions of the thorax are, it seems, most suited for ether-injection. Arnozan recommends the galvanic current in brief application if the neuritis is once established.

Antipyrin in Phthisis and other Febrile Disorders.—Dr. J. Holland, of St. Moritz, Switzerland, writes on the above subject in the May Practitioner. At St. Moritz, in the Engadine, great opportunities for the study of phthisis are afforded by the thousands that seek relief in its extraordinary climate and beautifully grand scenery. Dr. Holland says:

"Besides rest, even to the extent of confining one's patient to bed, and careful dieting, one must have recourse to medicinal remedies. I have generally found the following useful, although sometimes one and all have been extremely disappointing: quinine, the various preparations of salicin, digitalis, aconite, kairin, and Warburg's tincture are the principal drugs I have employed, and I find they are more efficient when given in some effervescing form. For the last eight months I have been using "antipyrin," and certainly in my hands it has been more successful than all the other drugs put together. As my experience of the action of the remedy has been mostly in the pyrexia of phthisis, I wish to speak of it particularly with reference to its effect in this disease."

Then follows a recital of a series of cases. We select the following as particularly to the point:

"Case 12. A patient who had been suffering from chronic phthisis for three or four years. Had spent two winters on the Riviera and had at first derived much benefit. He

had lately not done so well, and Dr. Sturge was of the opinion that a change of climate might be beneficial. During the greater part of this winter there has been a tendency to a slight degree of pyrexia; on some occasions the thermometer has registered 102°. Last winter also he suffered from chronic fever. The patient, who is highly intelligent, has been accustomed to watch his temperature, and take quinine and various other drugs when it was high. I prescribed antipyrin in 15 gr. doses, and his report of the effect of the drug upon him is shortly this: "If certain sensations arise which I now know perfectly well from past experience denote an approaching attack of fever, I immediately take one of the antipyrin powders. Generally within an hour or so I feel much more comfortable, and if I use the thermometer my temperature is almost invariably normal, or at most 1–5 or 2–5 above. Neither quinine nor any other drug that I have taken has had such a soothing or beneficial effect upon me. By the use of antipyrin I feel that I ward off a feverish attack— an attack that used always produce headache, lassitude, aversion to food, and general discomfort." Since this remedy has been freely employed the patient has been steadily improving, and for the last two months he has had scarcely any rise of temperature and has not been using the drug."

Dr. Holland in conclusion states:

"I have administered antipyrin in other cases with great benefit. I can only say of antipyrin that in cases of chronic fever such as we have to deal with in consumption, it has no rival. Lately, in one of the medical journals, there was an account given of a case of poisoning by this drug after 30 grains had been given, and, if my memory serves me right, 15 grains more after a short interval. Beyond the few symptoms of disturbance which I have related in my cases, and which were in no way serious, I believe 15 or 20 grains may be given every four hours to adults, without any fear of bad results,"

Infant Feeding.—At the meeting, June 4, of the Obstetrical Society of Philadelphia Dr. J. M. Keating said (New York Medical Journal) that, at his request, Dr. Charles Potts had instituted a series of experiments which had a decided practical value, and they hoped to present them to the society at an early date. He desired to place on record a statement of the results so far reached, which appeared to be interesting and important. The question often arose: Was it of advantage or not for an infant to be partly nursed and partly bottle-fed? What action had milk upon starch, if any? To answer this the following tests were made: 1. A sample of milk composed of the milk of several women, contained, according to a quantitative estimation by Fehling's method, 6.84 per cent of sugar. Ten c. cm. of this milk were then taken, ½ gram of powdered starch was added, and the mixture was allowed to stand at a temperature of 99° F. for thirty minutes, after which 5 c. cm. diluted with 45 c. cm. of distilled water, were tested and showed 8.62 per cent of sugar. The other 5 c. cm., after standing sixty minutes, gave 9.09 per cent. 2. Another sample, found to contain 7.14 per cent of sugar, had ½ gram of powdered starch added as in No. 1. In thirty minutes it gave 9.803 per cent of sugar in 5 c. cm. The other 5 c. cm., after remaining sixty minutes, gave 8.62 per cent. Possibly part of the sugar deposited was drawn off with the first 5 c. cm. 3. Another sample showed 6.32 per cent of sugar, and, after the addition of starch as before, gave in the first 5 c. cm. 8.19 per cent, and in the next 5 c. cm. 7.93 per cent. These investigations showed that the women's milk gave an increase of sugar after digesting with starch. 4. A sample of cow's milk was tested and found to contain 3.87 per cent of sugar. To this was added ½ gram of starch to 10 c. cm. At the end of thirty minutes 5 c. cm., diluted with 45 c. cm. of distilled water, showed no increase of sugar. 5. A sample of cow's milk gave 4 per cent of sugar, and was treated as before, but at the end of thirty minutes, and then sixty minutes, it gave the same result. 6. Another sample of cow's milk gave 3.703 per cent of

sugar. It was treated as before, with the same amount of starch. In thirty minutes 5 c. cm. gave the same result; in sixty minutes 5 c. cm. gave the same result. These investigations showed that cow's milk gave no increase of sugar after the addition of starch. Did the acidity of cow's milk prevent the sugar change? Did the sugar change continue in an acid medium? 7. Another sample of human milk—from one woman—yielded 6.25 per cent of sugar. Starch was added as before. In thirty minutes 5 c. cm. gave 7.14, and in sixty minutes 5 c. cm. gave 7.6 per cent of sugar. To 10 c. cm. of this milk (containing 6.25 per cent of sugar) a few drops of dilute hydrochloric acid, enough to faintly acidulate it, were added, and then ½ gram of starch, and it was allowed to stand as before. In thirty minutes 5 c. cm. gave 6.41 per cent, and in sixty minutes 5 c. cm. gave 7.35 per cent of sugar. 8. Another sample of woman's milk without starch gave 6.17 per cent, with starch 7.24 per cent. Ten c. cm. of the same acidulated with hydrochloric acid, diluted, gave in thirty minutes 7.35 per cent. In these tests 10 c. cm. of Fehling's solution were used with 40 c. cm. of distilled water. If future investigations proved the correctness of these statements, we might safely assert that the nursing woman might advantageously supplement her breast milk with some well-prepared digestible form of food containing a small quantity of starch, and also that the amylolytic ferment would remain active in the slightly acid stomach of the infant.

Notes on the Treatment of Bronchitis in Young Children.—The Therapeutic Gazette writes: It is premised that the same general rules apply to the treatment of all serious lung inflammations in children; depletion being usually unsatisfactory as to its results, antimony and veratrum viride also being unsuitable in most cases, while leeching is occasionally admissible at the beginning of an attack. A jacket-poultice of flaxseed meal with a small quantity of mustard, and covered with oil silk, is highly approved, and may be continued in position twelve hours or more. Ammonia salts may be given internally, but should be repeated frequently, as their effect is transitory. Oil of eucalyptus, oil of turpentine, and syrup of garlic are very useful in the later stages of the disease. Milk punch, quinine, and digitalis are usually indicated for tonic and stimulating purposes. In suffocative catarrhal bronchitis, especial stress is laid upon the value of hot and cold water, dashed alternately upon the chest, and followed by immersion into very hot water.

Drunkenness at the Moment of Conception; Its Influence on Progeny.—The New York Medical Abstract quotes the Journal de Médicine et de Chirurgie as follows: "In a very remarkable work on alcoholism, Dr. Lentz de Tournai finds this question the most difficult to solve of all the many problems connected with alcoholic intoxication, on account of the infinite shades of difference which arise between two factors—the wholly transient state of drunkenness, and that permanent condition brought about by more frequent, though still transitory, intoxications. Demeaux is one of the very few writers who have made a careful examination of the question, and from the cases he succeeded in bringing together he felt justified in the general conclusion that drunkenness in the parents at the time of conception is one of the principal causes of the nervous affections which often beset the new-born child. He also finds that the intelligence and moral senses of such progeny are tainted with the influence of the vicious habit. The child born of parents who were in a state of alcoholic intoxication at the moment of conception is ordinarily carried off by convulsions or other nervous troubles. If it lives at all it remains in a condition of epilepsy, idiocy or imbecility, and has a tendency to indecency, immorality, and general depravity. As an adult he has an aspect peculiar to the diathesis; his head is small, his physiognomy hebetudinous (hébété), and his gaze stupid and expressionless. M. Lentz does not fully accept Demeaux' conclusions except so far as

they may be correct in cases of fully commenced alcoholism, rather than in episodical drunkenness. He points out the curious fact that the first-born child is usually—among the working-classes at least—conceived while its parents were more or less under the influence of alcoholic drinks. Indeed, it is rare among these people to see a wedding repast at which the newly married man is not acutely affected by alcohol. Yet we do not observe, he says, that the children of workingmen are more liable to suffer from hereditary evils than those born afterward. Still, the question is an open one. Certain it is that history and tradition present some ideas and facts which cannot be ignored in the consideration of this matter. Even mythology incorporates the idea that evil results from toxic conceptions. M. Lentz remembers that the lame Vulcan was conceived whilst Jupiter was intoxicated with nectar. He also cites some of the more prominent facts of history concerning this matter as showing the general consensus of the ancients respecting it. "Young man," said Diogenes, to a stupid child, "thy father was drunk when thy mother brought thee into the world." Aristotle believed that a woman given to drunkenness would engender drunken children, and Plutarch affirms the same thing. The legislation of Lycurgus favored drunkenness in his conquered tributaries in order to stifle their aspirations and develop in them and their descendants such instincts and appetites as would tend to keep them slaves. In Carthage the laws forbade the drinking of anything but water on days of intended marital cohabitation. Hippocrates himself signalized the unfortunate effects of drunkenness at the time of conception."

Dr. Ferran and Cholera.—The following is a translation from a well known Spanish provincial paper, which appeared under the heading, "Dr. Ferran, The Scientific Commission, and the Newspaper Correspondents," in the issue of June 18, and is contained in the British Medical Journal:

"A very respected person in Valencia writes us the following. Here in Valencia we have three choleras, which are Dr. Ferran, the Scientific Commission, and the newspaper correspondents of the Madrid journals. The first has not been able to impede the spread of the epidemic, and, afterwards, has disturbed the tranquility of the towns, producing extraordinary excitement. The second is losing precious time, and, up to the present time, no one has seen the practical utility of its works. Many deplore that the tardiness of their proceedings prevent the government and local authorities from adopting all the measures which the circumstances require. Lastly, the correspondents of the newspapers, with the exception of the ———, who writes with discretion, and neither exaggerates nor disfigures the truth, are producing alarming panics by their absurd and inexact news. For my part, it is clear that the system of Ferran, of cultivating microbes and of producing 'slight cases' of cholera, is extremely hazardous, and able to produce fatal results; nevertheless, I do not wish to discuss the question of inoculation. I only mention, as eloquent facts, that the condition of the four last inoculated cases is very grave; that the medical man who died a few days ago had been inoculated; and that, in the village, many of those formerly inoculated have also died. I believed that the Scientific Commission was going to free us from these evils, but find now that it comes to complicate the situation. To begin with, in place of experimenting on animals, as was natural and logical, and as was the custom formally, they make the experiments on people who are willing to submit. Among many other inconveniences of importance, this has made it impossible to make certain classes of experiments, which might be very useful. Anyway, the '200 guinea-pigs' have been useless. Moreover, the Commission ought, in my opinion, by this time to have decided on nature of the disease which reigns here; but, strange to say, the gentlemen of the Commission decline to say officially what they tell all the world privately. Why do they not formulate their opinion? I do not know; but the fact is that the first, and certainly the

most peremptory duty it has to fill, is to declare the true character of the epidemic. It is lamentable that the enthusiastic gentlemen of the Commission, with its essentially scientific work, should forget that the authorities, the Government and the country are waiting, with natural impatience, the conclusions of its studies. For the other part, the correspondents of the Madrid papers paint the situation in Valencia in very fantastic colors. Some try to make political capital of this matter, and others try to give novelty and transcendency to their letters and telegrams by their reports. Fortunately, however, we are better than people believe, and every day we see with astonishment the notices referring to Valencia which the Madrid papers publish. In the towns there is considerably less disease than is reported, and even less in the capital (Valencia). Yesterday (June 8th), for example, there were only two cases, and very doubtful ones."

Varicocele Treated by the Subcutaneous Wire Loop. The Lancet reports on one hundred cases so treated by Richard Barwell, F.R.C.S.

"Henry B., æt. 17, and John J., æt. 16, came under my care for the cure of varicocele, which had caused their rejection by the examining officers of Her Majesty's navy. April 16 I performed on these lads the operation which I introduced some years ago—viz., that of passing subcutaneously round the veins a wire loop, which being tightened every other day, first occludes and then slowly cuts through them. In the case of Henry this process was completed and the wire came away on the 13th day; in the case of John on the 15th day. In neither case was there any suppuration or swelling, and only momentary pain at the time of tightening the wires. The only instruments required are a needle armed with about ten inches of silver wire, gauge 26, or even a little less; a pair of pliers, and an oval shield of vulcanite $\frac{1}{8}$ of an inch thick, with a long diameter of an inch, a short one of about $\frac{3}{4}$ of an inch. Near each end is a brass upright, projecting $\frac{1}{4}$ of an inch. Close to the spots where these uprights are fixed the shield is perforated by oblique channels which open on the other side near the center. The surgeon must very carefully separate all the veins from the vas deferens, and squeezing together between his left thumb and index the two sides of the scrotum, he keeps the duct and the spermatic artery behind and the veins in front. He then thrusts the armed needle through that half of the scrotum from without inwards, thus placing the silver wire between the above-named parts; he then reintroduces the needle at the previous hole of exit, and when its point lies within the scrotal cavity he relaxes his grasp on that part, and partly by passing the needle onward, partly by manipulating the veins behind its point, he brings the original opening of entry towards it and extrudes the needle. It is only necessary to be sure that no veins escape, and that no part of the lining fascia of the scrotal cavity is included. When the manipulations are completed the veins are encircled by a loop of wire, the ends of which hang out of one puncture at the outer side of the sac. These ends are each passed through one of the holes in the shield, and when drawn sufficiently tight are secured by twisting them around the uprights. It is well, however, to place three or four folds of lint, or better still, a piece of felt, in which a slit has been cut, between the shield and the skin. Every other day the wire must be unwound from one of the uprights, tightened, and replaced. Thus it acts as a very slow écraseur and cuts through the veins in some time between 8 and 16 days, according to the bulk of the varicocele. Of the 100 cases operated on by me in hospital and private practice, in no case was there any bleeding, shivering, pyrexia, erysipelas, or other disquieting manifestation. In 16 there was slight suppuration; in 15 of these the pus found its way out along the wires, and gave rise to no trouble; in 1 a little abscess formed in the thickness of the scrotum and was evacuated by an incision $\frac{1}{8}$ of an inch long. In 12 there was a little ulceration where the shield pressed against the skin; it healed when the

wire came away. In 1 there was some orchitis, which lasted five days. In 71 there were none even of these trifling complications, the course of events being precisely like that of the cases above recorded. Three patients would not submit to be confined, but walked out after the second day; one of these belonged to the class in which some suppuration occurred, the other two to that in which no complication took place. The very slight degree of pain, either at the time or afterwards, should also be mentioned. I have operated on five cases without any anesthetic.

Sequestration of the Whole Bony Labyrinth.—Walter Pye gives an account with illustrations,in the British Medical Journal, of June 13, 1885,of a specimen consisting of the whole bony labyrinth, separated by necrosis and removed as a sequestrum from a child four and a half years old. The tympanic cavity, the three semi-circular canals and the cochlea are present in almost their whole extent and with a lens the details of the scalæ, the lamina spiralis, etc., can be seen. The child had had scarlet fever eighteen months previously. There was an abscess of the mastoid process on admission, absolute deafness and complete left facial paralysis.

The paralysis extended to all the muscles supplied by the portio dura, including those of the tongue, and was associated with irritation of the cornea. On September 22, 1883, as the discharge had continued unabated for about three months, it was decided to enlarge the external opening and determine whether there was any sequestrum loose enough to be removed. Accordingly, a semicircular incision was made behind the ear; and, on exposing the bone, a ragged opening in it was found, nearly half an inch behind,and on a level with, the auditory meatus. This led directly inwards, and at the depth of about an inch, a loose irregular shaped sequestrum could be felt with a probe, but it could not be removed through the surface-opening. This was consequently considerably enlarged with a gouge, and the specimen shown was then extracted in its present condition. The cavity in which it lay was smooth, and felt like the ordinary bony chamber of a sequestrum, except in its upper part, where it was soft and bulging; but to the finger the impression of depth was very striking, it being difficult at first to believe that it (the finger) was still within the boundary of the petrous bone, and was not engaged in one of the central cavities of the brain.

There was no bleeding, and the after treatment was perfectly simple; the child had no bad symptoms from first to last, the wound healing quickly and soundly, and the discharge from the ear ceasing in about a week.

The course of the facial paralysis is more noteworthy. This was noticed to improve very soon after the operation (about ten days probably, but the exact date is not noted),and at the end of two months was obviously much diminished.

Mr. Pye then describes three similar cases described in Toynbee's Diseases of the Ear, and says: "The records of otology contain descriptions of fragmentary sequestration." It appears that his specimen is the most remarkable in its perfection.

In conclusion, Mr. Pye makes the following reference to the embryological features of the case:

"But, perhaps, the most interesting point about all these cases of sequestra,consisting of the whole or of portions of the labyrinth, is the fact that we have here the inflammatory process acting as the anatomist of by-gone days, fashioning out of the various component parts of the periotic capsule that artificial creation "the bony labyrinth;" as if it, indeed, were a separate irregular eburnated sac, embedded in the petrous bone, like a fly in amber; in it, but not of it.

That such a conception is erroneous, is, of course, now well recognized, for the investigation of the mode of development of the parts in connection with the organ of hearing shows that the auditory capsule, or sac,of the membranous labyrinth is surrounded by and enclosed in the cartilaginous segments of the periotic capsule, which latter ossify around this labyrinth, forming the petrous

and squamous bones, and having large lymphatic spaces intervening, within which the perilymph collects.

The greater density of those portions of the three original periotic bones which are next to these perilymphatic spaces, gives the appearance as of a structure embedded in, and differing from, the rest of the petrous bone; and, no doubt from this same cause, the general progress of the disintegration by necrosis of the petrous bone, was arrested, in the specimen here exhibited, so that the appearance is presented of a "bony labyrinth," dug out, as it were, from the rest of the bone to which it properly belongs."

Infectiousness of Phthisical Sputa.—The Practitioner abstracts as follows from the Gazzetta degli Ospitali: Prof. S. Sirena and Dr. B. Pernice have made a series of investigations upon the transmissibility of tuberculosis by means of the sputa of phthisical patients. Their experiments were performed with great care as to details, and lead to the following conclusions: (1) The liquid obtained from the evaporation of tuberculous expectoration is constantly free from the bacilli of Koch, and, when injected into the cornea,subcutaneous cellular tissue, or into the peritoneal cavity,as a general result, produced neither local nor general tuberculosis. (2) That phthisis-producing bacilli are not found in the surrounding atmosphere, as a result of evaporation of tuberculous sputa, though such organisms may be very abundant therein. (3) Respiration for several hours, or for a protracted period of several days, in a close atmosphere in which are contained the exhalations from phthisical sputa does not produce tuberculosis in animals. (4) Animals confined in close quarters and compelled to breathe an atmosphere laden with the dust of dry tuberculous sputa, do not contract tuberculosis. (5) The subcutaneous injection of tuberculous matter produces for the most part a local specific manifestation, as is shown by the presence of tuberculous bacilli in the pus of the lesion, and after a variable time produces tuberculosis of the abdominal or thoracic organs. (6) The injection of tuberculous sputa into the peritoneum produces first a local, and, secondarily, general tuberculosis in animals. (7) Tracheal injection of a solution of tuberculous sputum, even in animals affected with broncho-pulmonitis, is not the cause of a specific infection, but for the most part of septic croupous pneumonitis characterized by the presence of micrococci on the exudation.

Trophic Troubles Produced by Suggestion.—"Suggestion" is just at present playing a considerable part in the investigation of nervous affections, particularly in France. Some years ago a physician would have been hooted at if he had uttered sentences and related facts such as are quite common to-day in the learned societies of Paris. Although ours may be called the materialistic age par excellence, the spiritual part of our own selves is being more and more investigated and better understood.

Unfortunately there is a great discrepancy among the observers as to the strange phenomena produced at will by the experimenter in neurotic subjects, especially in the hysterical. But in spite of much conflicting evidence we are acquainted with facts to-day such as would have been rejected by physicians of 25 years ago as being the results of too vivid an imagination or even of wilful deception. It is the merit of the present generation of physicians to have cleared away much rubbish from the capricious and intricate disease, or rather number of diseases, called collectively "hysteria."

Aside from the production of troubles of sensation in the hysterical, more objective and palpable changes have been produced by mere "suggestion."

At the meeting of the Société de Biologie (Paris) of July 4, Report of the Semaine Médicale, July 8, Dumontpallier related his experiments instituted to verify or disprove the assertions made by Dr. Beaunis as to trophic troubles which can be provoked by simple suggestion.

Dumontpallier took common writing paper,

telling the patient that it was a fly-blister and applied it to her leg by means of a bandage. On removing this the next morning there were, it is true, no vesicles, but considerable redness, accompanied by an elevation of temperature of the skin. This increase of temperature amounted to 3° and and 4° (C.) above the normal. Then he applied again common paper with a suggestion to one, without a suggestion to the other leg. He found redness and elevation of temperature of the spot where the patient believed to have a fly-blister, but no change in the other leg. Dumontpallier declines to give an explanation, but insists on the exactness of the facts.

Brown-Séquard corroborated Dumontpallier's experiments by communicating to the society the case of a woman who saw a window fall down on the arms of her little daughter while this latter was resting them on the window-sill. The next day she had a large ecchymosis on the arm corresponding to the spot where the child had been struck. It was even larger and more intense than the injury of the child, and it took a longer time to heal.

Féré also corroborated the statements of the speaker.

In other countries accounts like the preceding one are generally set down as nursery tales; but the evidence of the truthfulness of such occurrences are fast accumulating and the possibility of trophic lesions by emotions and "suggestion" is not to be doubted. Unfortunately all accounts of this character come to us from France, whereas the English and American medical presses are remarkably silent on this point. What seems to be quite common in France is so rare in other countries that conscientious investigators feel misgivings as to the reality of these phenomena. But then it must be remembered that such forms of hysteria as observed and described by Charcot are in vain sought in other countries. It seems that it takes the specific surroundings of a French hospital to develop such strange manifestations of nervous influence.

Treatment of Trichinosis.—Merkel reports in the Deutsches Archiv f. klin. Med. successful treatment of a case of trichinae-infection by means of glycerine. Trichinous sausage had been eaten by a number of persons. Twenty hours after, one of the patients was given a compound infusion of senna; the copious dejections contained a large number of free parasites. On the following day one tablespoonful of glycerine was given at intervals of one hour until fifteen doses were taken. The patient escaped general infection; the other consumers had genuine trichinosis.

Creasote Water as a Local Anesthetic.—Dr. E. R. Squibbs writes in Ephemeris, March, 1885:

"The officinal aqua creasoti, or creasote water, is so important as a preparation for one special use that it is well to notice it in order to emphasize that special use. It is a simple one per cent solution of wood creasote in water, and, like similar solutions of carbolic acid and of cresol, it is a most effective local anesthetic and topical dressing to burns and scalds. It is no better than the solutions of carbolic acid, or of coal-tar creasote, for this purpose, but it is quite as good, so that whichever is most accessible or most convenient may be used. This creasote water, as made by the above formula, or diluted with an equal volume of water, or with more water for delicate surfaces in women and children, and applied by means of a single thickness of thin muslin, or worn-out cotton or linen, such as handkerchief stuff, and the application renewed from time to time, as the return of pain requires it, will relieve the pain of burns and scalds in five to ten minutes, and will maintain the relief as long as the applications are properly renewed, or until the painful stage is over. It is also very effective as a local anesthetic for general use in all painful conditions which affect the surface only, such as the pain of erysipelas. The benumbing effect of these phenols upon the skin is promptly reached, and can be carried to almost every degree that is desirable, by simple management of the strength of the

solutions and the mode of application. They are true anesthetics to the skin, which the much-lauded cocaine is not. This statement has been published so often during the past twenty years, and the treatment has been so effective in so many hands, that it is wonderful to notice how the common practice is still to use the old and comparatively useless hot dressings, such as carron oil, white lead ground in oil, flour, liniments, etc., or the newer application of solution of bicarbonate of sodium."

CONTRIBUTION.

OBSTRUCTION OF THE BOWELS.

BY WM. H. VEATCH, M. D., CARTHAGE, ILL.

Read before the Illinois State Medical Society Thursday, May 21, 1885.

Mr. President, Ladies and Gentlemen: —In selecting this great and intricate subject for your consideration to-day, I would not arrogate to myself a preeminence in the successful diagnosis and treatment of these frequently obscure maladies; nor would I attempt to present to the Society anything (outside of the authorities which I may cite), but my own humble experience in the diagnosis and treatment of a class of maladies which, to say the least, have proven themselves quite formidable, even in the hands of the most experienced surgeons of the present age; and whose diagnostic signs are sometimes so obscure that even those who are most frequently called upon to diagnose and treat them are not infrequently at a loss to determine the exact nature of the complaint or the most judicious plan of treatment to be adopted. If asked why I attempt the discussion of a subject of such magnitude, I would reply: "That I may know more of it;" our minds acting upon each other's thoughts may be brightened, as steel sharpeneth steel.

The fact that obstruction of the bowels may take place from a great variety of causes and in a diversity of ways, necessitates the division of the subject into a variety of heads, each indicating one of the causes producing it.

I must say that I am not fully satisfied with the division of this subject by our principal authors; none, that I have had access to, being comprehensive enough to guide the student into a correct diagnosis; therefore I must be allowed to ignore the divisions of the subject, as given by our recognized authors, and adopt a classification which in my humble judgment is in accordance with true pathological laws, and which is based on the nature of the causes producing the obstruction.

1. Obstruction of the bowels may take place from membranous bands constricting the caliber of the tube.
2. From attachment of one portion of the bowel to another, or from attachment to some other organ.
3. From a rotation or twisting of some portion of the tube upon its own axis, or upon an axis formed by a portion of the mesentery.
4. From one portion of the tube slipping through an opening in the mesentery, omentum or mesocolon.
5. From one portion of bowel compressing another, or it may be pressure from a tumor, enlarged ovary or a diseased uterus.
6. From one portion of the bowel being forced into another portion, commonly called invagination.
7. From foreign bodies finding their way into the alimentary canal.
8. From knotting of the tube.
9. From fibrous cords being thrown round the bowel.
10. From tubercular deposit.
11. From croupous inflammation and the formation of false membrane.
12. From fatty degeneration of the muscular walls of the bowels.

Whatever may be the cause of the obstruction the symptoms are much the same.

The so-called accidental causes spoken of by authors invariably present the same symptoms as those in which we know the cause to belong to a definite class.

A short analysis of some of these classes may not be amiss at this point, which I will attempt by presenting a typical case in each.

In the 8th variety of this classification, namely, knotting of the intestinal tube, cases are extremely rare; so much so that cases of this class may almost be said to be accidental. But in the Edinburgh Medical Journal for August, 1877, there is a case reported by Dr. M. W. Taylor in which a woman aged 40 years, lived fourteen days from the beginning of the attack. She had fecal vomiting on the third day, but no symptoms of inflammation. After death 22 inches of the ileum was found coiled on itself, so as to form a running knot, produc-

ing complete occlusion of the tube. Another case is recorded in Half Yearly Abstract of the Medical Sciences for 1863, by a French author, which appears to be very similar to the above.

In 54 autopsies collected by Dr. Hilton Fagge from the records of Guy's Hospital, seven were found to be twisted, but no case of knotting was found.

Dr. Taylor says he has not found a case of knotting of the intestinal tube in English medical literature in the past half century. I do not remember to have seen a case reported in the United States in the past twenty-five years. So we must conclude that knotting of the bowels is of rare occurrence.

Of the 9th class, namely, fibrous cords obstructing the bowels, I will state, that a very curious case is recorded in the British Medical Journal and reprinted in the Half Yearly Abstract for 1875, in which a fibrous cord was found extending from the middle of the abdominal wall, midway between the pubes and umbilicus, running backward toward the right iliac fossa. This cord passed amid the distended folds of the intestine to the lower part of the ileum, where it had formed a loop of the ileum 33 inches long, passing one and a half times round the gut, and passing into the mesentery, about three feet from the ileo-cecal valve. This cord was found to have been an abnormal hypogastric artery of the fetus.

With regard to the 10th division, or "tubercular deposit as a cause of obstruction," we have a very clear illustration in a cases recorded in the Medical Times and Gazette for October, 1876, by Dr. Walston of London. This case completely and effectually deceived the whole medical staff of the hospital, who concurred in the opinion that membranous bands existed in the case; but on examination after death the bowels presented the appearance of having been sprinkled over with boiled sago. On close inspection it was found to be tubercular deposit which involved the whole tube. The bowels were also so puckered by adhesions that the contents were found in a succession of pouches.

Croupous inflammation has not been regarded by our popular authors as a cause of bowel obstruction; but such a number of cases have been reported by different authors at different times that we are compelled to give that cause a prominent place as a distinct class. A single case will have to suffice as an illustration. A young man, 19 years old, in the British Government Hospital, after seven days of pain, vomiting and diarrhoea, followed by complete constipation and persistent vomiting, died two days after admission, with symtpoms of acute obstruction. On examination, the small intestines were found to be inflamed their entire length; a loop of the ileum just above the valve, dipped dowu into the pelvis. This loop was of a dark red color, much contracted, feeling like a cord under the finger. It was completely blocked up by a fibrous cast of croupous false membrane.

From the literature of the day, we are led to the conclusion that croupous inflammation is not so rare a cause of intestinal obstruction as it has formerly been regarded; but complete plugging of the canal is uncommon.

The last variety of this complaint, which for a long time failed to find a satisfactory explanation, has of late been fully demonstrated by Prof. F. Jordan, of Queen's College, Birmingham, who, I think, was the first to point out this class of cases. I have reference to the fatty degeneration of the muscular walls of the bowels.

Prof. Jordan had for some time observed occasional cases in extremely fat people, where death followed operations of various kinds, such as operations for strangulated hernia, in which the bowels had a peculiar yellow color, and were often enormously distended with gas. None of these cases showed any signs of inflammation of the peritoneum, and being at a loss to give a satisfactory explanation of the cause of death, he secured the aid of the distinguished microscopist, Dr. Wood of the same college, and to their utter surprise they found a complete fatty change in the muscular walls of the bowels.

Dr. Jordan says:

"1. The smooth muscular coat of the bowel is subject to fatty degeneration, which may become complete; and the muscular fibers wholly cease to contract from want of power of contractility, and cause death by relaxation and consequent inflation of gases, making pressure on surrounding organs, cutting off the circulation.

2. When this change is high up in the bowels, near the stomach, the obstruction is apt to be of the acute kind, resulting in death very speedily; but where the change is less complete, there follows a slower and much more fitful train of symptoms, the fatal termination being later but none the less certain.

3. Fatty change is more likely to occur in otherwise very fat persons, who are subject to fatty degeneration of other organs. In heart cases, for instance, death is quick and direct; in intestinal cases death comes later, but none the less sure.

4. As premonitory syncope from exhaust-

ion precedes death in heart cases, so attacks of temporary obstruction may precede final relaxation in bowel fattiness.

5. Continued flatulent distention soon wears out the weakened muscular fiber, and they lose the power of contractility, never to regain it. Even healthy muscular tissue is subject to fatal atony from long continued stretching; and slight fatty change greatly hastens the result.

6. When this change is complete, what was once muscular fiber has now become inactive fat, and death ensues from shock to the organs from distention. The customary explanation of these deaths, following operations for strangulated hernia, and severe injuries in persons with tendency to fatty change, is, in one case shock; in another, feeble heart with shock; in a third, ether or chloroform vomiting; in a fourth, rapid septic poisoning; in a fifth, incipient peritonitis." "Now," says Dr. Jordan, "I am far from saying that any of these are not adequate causes of death; but they do not satisfactorily account for death in the cases I have set forth."

"Pure shock is seldom followed by persistent vomiting. In cases of crushed joints and severe abdominal injuries in otherwise healthy persons, nervo-muscular action dwindles down, and death ensues frequently without persistent vomiting. That ether or chloroform vomiting should recur after a period of rest, is, to say the least of it, hypothetical; as is also the theory of rapid septic poisoning without rigors, or rise of temperature, or any of the other known features of the septic condition. Peritonitis, without the slightest signs of peritonitis, is a kind of pathology too thin to grasp."

"But in fatty change and consequent failure of contractility of the bowel walls, we have an explanation, based on clinical and microscopical observations; and which is consistent with known pathological laws."

In regard to some of the unique forms of obstruction of the bowels, where no definite diagnosis can be made out, I would say that the Glasgow Medical Journal for Feb. 1869, furnishes as striking an illustration as I have been able to find in all the literature on this subject at my disposal. Prof. J. W. Wilson, presents the case of a child, four months old, who died after an illness of seven days, with signs of acute obstruction of the bowels; the particular form of which could not be definitely made out. On examination post mortem, it was found that the whole colon was invaginated, and formed a mass in the descending colon, containing the transverse and ascending colon and the terminal portion of the ileum, and the caput cecumcoli.

These unique cases are occasionally met with in the almost endless variety of shapes the intestinal tube is thrown into, by the various causes operating upon it, the true nature of which cannot be made out until after death; and if it were possible to definitely diagnose them, their treatment would be as fruitless as their nature is now doubtful.

In regard to the different diagnosis of the many forms of bowel obstruction, I would say that there is no form of disease whose diagnostic signs are more obscure than this.

Prof. S. D. Grogs, says: "However the obstruction may have been induced, the symptoms are similar to those of strangulated hernia and is generally extremely embarrassing, and often entirely impracticable, both as it respects character and situation. The most reliable circumstances connected with the diagnosis is the absence of anything like a tumor in the abdominal and pelvic regions, and the almost complete obstinacy of the constipation and gastric distress. But these symptoms, prominent as they usually are, are altogether unreliable as signs of the disease, inasmuch as they are precisely like those which occur in incomplete inguinal and forward hernia, unattended with external swelling."

The text-books at my disposal throw but little light on the differential diagnosis of these affections ,Gross and Druitt both being quite meager in their treatises in that particular, devoting most of their space to operative measures, only six varieties being recognized by either of them.

Erichsen is somewhat more elaborate in his symptomatology, but divides all cases into but two classes, the acute and chronic; and the symptoms he treats under three heads; (1) the duration of the constipation; (2) the occurrence of fixed pain; and (3) the character of the vomiting.

But, Mr. Jonathan Hutchinson, in a paper presented to the British Medical Association, in 1878, on the diagnosis and treatment of intestinal obstruction, gives the most satisfactory treatise on this subject I have been able to find in medical literature.

I give his memoranda of diagnosis.

1. "If the patient is a child and becomes suddenly the subject of symptoms of bowel obstruction, it is usually either intussusception or peritonitis.

2. When the patient is an elderly person, the diagnosis is generally impaction or malignant disease.

3. When the patient is in middle age, the causes may be various, but intussusception

and malignant disease are both more uncommon than in the extremes of life.

4. Intussusception may generally be known by the incomplete constipation, the frequent straining, the passage of blood and mucus from the rectum, and the appearance of a sausage-like tumor, either felt through the walls of the abdomen or per rectum.

5. In intussusception, the abdomen usually remains lax for the first three or four days, and but little, if any, tympanitis manifests itself in that time, so that manipulations under ether may usually detect the sausage-like lump in the bowel.

6. Malignant disease may be suspected when in an old person, continued abdominal uneasiness is present, and repeated attacks of constipation have preceded the illness.

7. If tumors be present and pressing on the bowel, they are commonly discoverable by palpation under anesthesia, either through the walls of the abdomen or by the rectum or vagina. Great care must be taken not to be misled by scybalous masses in the bowels.

8. Congenital diverticulum may be present; and if repeated attacks of obstruction have occurred with long intervals of perfect health, we may suspect bands of adhesion, or that some portion of the intestinal tube may be puckered and liable to twist.

9. If in the early part of the case the abdomen becomes distended, tender and hard, we may be almost certain that peritonitis exists.

10. If the intestines roll about with much noise, it is almost certain that there is no peritonitis.

11. The tendency to vomit depends on three conditions or circumstances, (*a*) the nearness of the impediment to the stomach, (*b*) the tightness of the constriction, and (*c*) the persistence with which food or medicine have been given by the mouth.

12. Sickness of the stomach is frequently wholly absent in obstruction of the colon or rectum; and when vomiting does occur it is seldom stercoraceous.

13. Violent retching and bile vomiting is frequently more troublesome in cases of gall stones, or renal calculi simulating obstruction, than in true obstruction.

14. Fecal vomiting can only occur when the obstruction is low down in the bowel. If it come on early in the case it is a most serious symptom, implying tightness of the obstruction.

15. In all cases of obstruction of the bowels, there is more or less vital depression, particularly in cases arising from mechanical causes, such as hernia or volvulus."

The first symptom observed in local pain followed by constipation, the pain is of a drawing or tearing character, followed by a peculiar giving down of the vital energies, so that the patient drops down on the spot with a feeling of faintness.

Vomiting is usually an early symptom in all cases of obstruction of the small intestines, unless it be near the ileo-cecal-valve; then it is not so early a symptom, nor is it so persistent unless medication is pushed by the mouth.

Tenderness over the obstruction is an early symptom, and when invagination is present, a hard oblong lump, in size and shape much resembling a link of sausage, can be felt through the abdominal walls; but where the obstruction is from membranous bands, cords, loops, knots, or even from tubercular deposit, or fatty change, the diagnosis must be exceedingly difficult. When the obstruction is in any portion of the tube above the cecum, the vomiting is usually persistent, and the taste of the patient soon reveals the presence of stercoraceous matter, which is a useful auxiliary in differentiating obstruction and peritonitis.

Some authors hold that when the obstruction is in the colon, that it is usually of a chronic form; but observation has proven this to be incorrect.

Most authors differentiate invagination from other obstruction by the constipation not being complete, and by the tenesmus and muco-sanguinous stools.

Prognosis.—Obstruction of the bowels in all the forms known to our profession, is regarded by all authors as being, in the mass of cases, necessarily fatal.

Dr. Samuel D. Gross says: "The symptoms, prominent as they usually are, are altogether unreliable as signs of the disease, inasmuch as they are precisely like those in incomplete inguinal and femoral hernia, unattended with external swelling; therefore, internal strangulation is usually a fatal disease, its very obscurity forbidding interference."

Prof. Sands, in a paper published in the New York Medical Journal, June 1877, says: "Internal obstruction, particularly that form known as invagination, if left to its natural course, terminates fatally in a large majority of cases. In infants the mortality is especially high, being not less than 66 per cent of the entire number, whether subjected to treatment or not."

Statistics show that the mass of sufferers from this complaint die.

Dr. John Ashhurst, in an article on "Abdominal Section as a Remedy for Intussusception," has given a very concise history of thirteen cases, in which laparotomy was performed. He then gives an elaborate table from the reports of others, an inspection of which shows that we have no encouragement to operate on children under one year of age, as no case has been reported favorably.

Of 162 cases operated on by Piltz, all children, 91 were under one year of age. So, to begin with, we have to exclude a large proportion of cases as unfit for operative treatment.

The tables of Lichtenstern, give no less than 86 per cent as the death rate in children under ten years of age. The tables also show that these are precisely the cases in which we have most hope of recovery from sloughing of the invaginated portion of the tube.

These tables give 557 cases, in which no operation was done, and in which the final result of the cases were known. In 149 of the 557, sloughing of the invaginated portion took place; and in 88 of the 149 complete recovery took place; and in 408 cases in which sloughing did not take place, only 63 recovered, and 345 died.

"There is, then, a limited number of cases in which adults, or at least in not very young children, where the symptoms indicate obstruction without either hemorrhage or peritonitis, and in which other means have failed, that the question of operative interference may properly be considered. But at what point the medication and manipulation should be abandoned for operative measures must be left to the opinion of the operator in each particular case."

Dr. Ashhurst tabulates 70 cases of laparotomy for all forms of obstruction other than intussusception, which I believe is the largest number yet collected by any surgeon. In his first table of 13 he had 5 recoveries and 8 deaths, and in the second table of 57 cases he had 18 recoveries and 39 deaths.

Mr. Ashhurst concludes his paper thus:

"1. That operation can be of no avail in cases of intussusception in children under one year of age.

2. That when the invagination is low down in the bowels, and so tight as to favor sloughing, no operation should be attempted.

3. Exceptional cases occur where the patient is in imminent danger of sinking from exhaustion and continued suffering; if the patient's age and other conditions do not forbid, an operation may be done.

4. When an operation is determined upon laparotomy should be chosen.

5. In obstruction other than invagination, if other means have failed to give relief in three or four days, laparotomy may be done as a dernier ressort."

Mr. Hutchinson, in his paper before referred to, thus gives his memoranda of treatment:

"1. In all early stages and in all acute cases abstain from giving either medicine or food by the mouth.

2. Use anesthetics promptly. Examine the abdomen early, before tympanitis sets in to obscure the conditions. Administer large enemata in the inverted position, and use taxis thoroughly.

3. Aid the injections by the use of a long tube into the bowels.

4. If injections fail, substitute insufflation of air, in cases of invagination.

5. In cases of stricture, insufflation should be avoided, as air may pass above the stricture and there be retained.

6. Saline laxatives may be used in cases of impaction or stricture from fibrous cords, or membranous bands to render the fecal matter fluid.

7. Opiates must be used in proportion to the pain, combined with belladonna and given hypodermically.

8. Full doses of opium may put the patient in a favorable condition for prolonged examination under ether.

9. In cases of uncertain diagnosis it is better to trust to spontaneous cure than to risk an exploratory operation.

10. Operation for artificial anus, through the anterior wall of the abdomen, should be resorted to only when there is incurable obstruction above the colon.

11. In all cases where the precise site of the obstruction cannot be made out, but the large intestine is suspected, the right loin should be selected for the site of the operation.

12. Mechanical obstructions of the bowels are always surgical and not medical cases, and require manipulative measures, both for diagnosis and treatment, and they require them early."

Too often a casual examination only reveals constipation, for which a cathartic is prescribed, and the patient directed, if the bowels do not move in a certain number of hours, to take a dose of oil or salts.

The stomach most likely rejects everything taken into it, and in twenty-four or thirty-six hours we are again called to find

the patient much prostrated. Stercoraceous vomiting, with tenderness and tympanitis may be so great that a thorough examination is impossible.

Some eminent surgeons adhere to the expectant plan of treatment.

Dr. John L. Atlee reports to the American Journal of Medical Sciences in 1873, a case treated by his pupil, Dr. A. S. Bare, of Lancaster, Pa., in which he fully endorses the expectant plan of treatment which had been adopted. He says, in his letter to the publisher, accompanying the report:

"It is one of those cases in which death is uniformly the result. In this case I have no doubt that the successful issue of the case is attributable to the early diagnosis of Dr. Bare, and the very judicious treatment adopted by him from the commencement."

Dr. Bare's diagnosis was, intussusception of the ileum; and his treatment was opium and blue mass from the beginning to the end, accompanied by warm water injections.

On the seventh day, the bowels were opened and on the thirtieth day a portion of the ileum thirteen inches long came away. The patient was a woman 58 years of age. She made a good recovery.

A number of such cases are on record, where the obstruction was low in the bowels, where spontaneous recovery has taken place by sloughing of the invaginated portion of the bowel.

Insufflation of air into the bowels, by means of a bellows, has been practiced by a few surgeons with marked success. But it is not without its dangers, particularly where the obstruction is from bands of adhesion. The air passing beyond the point of obstruction and there making pressure on vital organs may do great harm. But in invagination there is perhaps no more safe and judicious plan of treatment.

Dr. Wilks, of Guy's Hospital, reports a successful case in a child six months old, treated in this way, and commends the plan to others as safe and efficient. Dr. Gorham, of the same institution, has had marked success in the treatment of children for intussusception by this plan. A novel and unique plan of treatment has been reported from the Marseilles Dispensary by Dr. Olive, wherein tobacco smoke was forced into the bowels, and succeeded where other measures had failed.

Another unique plan has been adopted by Dr. Thomas Head, of St. Bartholomew's Hospital. He inverts the patient and injects warm olive oil and quicksilver into the rectum; then holds the patient up by the legs to allow the quicksilver to traverse the intestinal tube by gravitation. This plan has succeeded admirably in the hands of Dr. Head, and might be worth trying in this country.

Dr. Thomas Buckler, of Baltimore, advocates the use of belladonna in appropriate doses to produce complete relaxation of the muscularcoat of the bowels,and then gives from one to two ounce doses of hog's lard every two hours until it makes its way through the obstruction.

Dr. Wagstaff, of St. Thomas' Hospital, holds that many cases of bowel obstruction die from an accumulation of gases in the intestinal tube, making pressure on the circulation in such a way as to cause collapse and death. In such cases he resorts to tapping the bowels through the abdominal walls with a fine trocar, allowing the gas to escape.

Injections of warm water in connection with large doses of opium and belladonna has been more favorably reported, I believe, than any other plan of treatment, and has been attended with great success, curing a greater proportion of cases than any other plan of treatment. The manner of using the water is an important point in its successful use. The plan to be followed where the patient is not too much prostrated to occupy the position, is to place the patient in the knee-breast position, then fill him as full of water as it is possible for him to retain; occasionally manipulating the abdomen to cause a more ready flow of the water upward. When the large bowel is full, the patient may be turned, first on his right side, and then allowed to sit or stand erect to facilitate the passage of the water through the tube. As soon as the patient is able to retain it, more water must be thrown into the bowels. An assistant may do good service by pressing firmly on either sides of the nates with the hands while the water is being injected, to assist the patient to retain it. When the patient is too much prostrated to occupy this position, he must be placed, first on his left side, with the hips elevated as much as possible, and then proceed as before. I have had complete success in two out of three cases of intussusception, and in the same ratio with three cases of impaction. My first case was a man about 80 years of age with impaction of fecal matter in the transverse and descending colon. He had gone about twenty days without an action on the bowels. Vomiting was quite troublesome, but no fecal matter had been ejected. Fever had supervened, and the impaction was so complete that the rectum was pressed upon, so that it was not over two

inches in length. The finger could easily reach the opening into the colon. A long stomach tube was attached to a large hard rubber piston syringe, and water as hot as could be borne by the patient was thrown up into the bowels. The hard flakes, scales and lumps of fecal matter began to flow away, and when several gallons of water had been used, the contents of the bowels became soft and his bowels moved without the power to control them. Such complete relaxation ensued that he was never again able to control the action of the bowels.

My second case was a man æt. 60 years, who in eating pig's feet had allowed one of the metatarsal bones to slip down his throat. He felt no inconvenience from it, so he said nothing about it. In about a week his bowels became constipated, and he went twelve days without an action, then presented himself for treatment. He told me nothing of the bone until after he was relieved, and you can imagine my surprise on finding a hard lump by the left side of the rectum, making such pressure against it that it was with some difficulty that I passed my finger beyond it. In this case also the rectum was much shortened, the finger easily reaching its full length. Hooking the finger into the opening in the colon, and making slight traction I was surprised to find the supposed tumor slip up and through the opening. A polypus forceps was applied and by a twisting movement a bone half an inch thick and one and three-eighths inches long, came from the gut. Then followed a flow of semi-solid fecal matter from the man, such as I had never seen before, have never seen since and hope never to see again.

My third case was one of those enormously distended scrotal hernias, the largest I ever witnessed. This sac measured thirty-four inches around from nates to pubis, and twenty-six inches in its lateral circumference. Complete obstruction of the bowels had existed for three weeks. Fever and wild delirium had supervened, and at my first visit he was unconscious. I had but little hope of relieving him, he being about 60 years of age.

A long stomach tube was introduced into the bowels and hot water injected as long as it could be retained. Soon the patient showed signs of pain, then followed a condition of collapse, and I expressed the opinion that he was dying.

In half an hour, however, his bowels started, and he revived. About a year after he sank under a similar attack.

My fourth case was a case of intussusception in a strong, healthy man of 28 years of age, who felt something give way in his right side while lifting at the power of a threshing machine. He became quite faint at the time but soon rallied and continued control of the power during the day. I saw him on the third day, and notwithstanding there was considerable tympanitis, I could very distinctly feel the invaginated bowel beginning at the ileo-cecal valve and extending the entire length of the ascending colon. Every means attempted in his case gave no relief, and the family being opposed to operative measures, he sank on the fifth day. No post-mortem examination was allowed.

My fifth case occurred in Carthage. A man aged 41 years, subject to chronic diarrhea, was taken with local pain in the region of the ileo-cecal valve. Vomiting of fecal matter ensued after the third day. The sausage-like lump was easily felt through the thin abdominal walls. Morphine under the skin, and hot water by the rectum gave complete relief. A full history of this case may be found in the Peoria Medical Monthly, for September, 1883.

My sixth case occurred also in Carthage. A man 28 years of age while walking on the icy sidewalk in Quincy, slipped and he was nearly thrown from his feet; in his effort to save himself from falling he thought he had strained the muscles of the abdomen. He went to his hotel, and being in a hurry he ran up stairs three steps at one stride. When in his room he felt a kind of sinking feeling come over him for a short time; he soon rallied and went down to supper, where he partook of a full meal. At 10 o'clock P. M. he was taken with excessive local pain in the right hypogastrium. A physician was called and prescribed an emetic. The stomach was emptied, but the pain continued. He was conveyed to the train early the next morning and came to his home in Carthage. I saw him at 11 o'clock A. M. He was in such pain that a thorough examination was impracticable. I gave him a hypodermic injection of belladonna and morphine. At 1 P. M. I saw him again. He was not suffering so much pain, but a condition of collapse appeared to completely overpower him. On examination I could distinctly feel the invaginated colon at the junction of the ascending and transverse portions. He vomited everything he had swallowed during the morning. I lost no time in throwing hot water into the rectum, which, during the afternoon, I used as often as six times, to the extent of his capacity to retain. At 4 P. M. no lumps could be found in the side, although considerable soreness remained. In a few days he was up again.

From the success attending the use of hot

water injections I cannot too strongly commend this plan of treatment to the profession in all cases of invagination below the ileo-cecal valve. Should this plan fail me, I would then resort to insufflation of air. If both fail, and the patient's condition do not forbid, I would, as a dernier ressort, open the abdomen.

In all cases of impaction I should hold on to the hot water until no good could be derived from it, and then try the hog's lard as hot as it could be tolerated.

SOCIETY PROCEEDINGS.

STATE MEDICAL SOCIETY OF WISCONSIN.

REPORTED FOR THE REVIEW, BY DR. J. T. REEVE, APPLETON, WIS.

The Thirty-ninth Annual Meeting of this body was held in Milwaukee, June 2–4, 1885, Dr. E. W. Bartlett presiding.

The President's Address, subject, "Yours Fraternally," gave occasion for some animated discussion, and for the adoption of a resolution reaffirming the adherence of the Society to the Code of the American Medical Association.

Dr. W. Meacher, of the Committee on Surgery, presented two papers; one discussing the comparative merits of Syme's and Pirogoff's operations, the other on Rectal Surgery, with Special Reference to the Treatment of Hemorrhoids and Fistula.

Dr. Marks, of the Committee on Surgery, discussed the management of hernia, inguinal and femoral, favoring early operation in the latter when taxis failed, but arguing for delay and the use of narcotics in the former. He would push narcotics for twenty-four hours or more in a case of inguinal rupture, provided there was no fecal vomiting or other urgent symptoms, and had proved the value of so doing in many cases.

Dr. Senn, in the discussion that followed Dr. Marks' paper, said that it was the duty of the surgeon who operated for strangulated hernia to perform at the same time an operation for the radical cure of the affection.

Drs. Sheldon, Dodson, Epley, Eldridge and others took part in the discussion and quoted cases in illustration of their remarks.

Drs. Armstrong, Davies and Stalker presented papers on obstetric topics; the last named gentleman giving an account of a case of arrested development with photographs.

Drs. Senn and La Count each exhibited a pathological specimen, the one showing a case of osteo-myelitis in which treatment had been delayed and the limb lost, the other a case of the same disease, where early energetic measures had been attended with excellent results.

Dr. G. F. Witter exhibited a photograph of a child upon whom an operation for hare-lip and cleft palate had been performed successfully at the age of four weeks.

Dr. J. M. Dodson read a paper on the Treatment of Pyrexia, advocating the use of the cold bath as the best means of reducing temperature; next to this he thought the cold pack the most efficient agent, and next in value the application of ice to the spine. Of drugs he considered quinine the most valuable anti-pyretic, but held that it must be employed in very large doses.

Dr. Harmon Van Dusen, of Mineral Point, presented to the Society the diploma issued to him by the Onondaga County Medical Society of New York in 1826. The presentation was made on behalf of Dr. Van Dusen by Dr. Whiting, of Janesville, in a few felicitous remarks, Dr. Van Dusen being, by reason of his great age, unable to attend the meeting in person; the present session of the society was the first one since its organization at which the venerable doctor had failed to be present. The Society received the gift with thanks and directed that it be deposited in the rooms of the State Historical Society for safe-keeping.

Drs. Wigginton and Buckmaster of the Committee on Nervous Diseases offered papers, the former gentleman treating especially of the duty of the medical profession to the insane, and the latter reporting a case of mysophobia, or dread of uncleanliness, and read ing anarticle on "Illustrious Insane," among whom he thought many persons who had exercised a marked influence upon the history of the world should be numbered.

Dr. Gapen gave an account of a case very similar to the one reported by Dr. Buckmaster, and thought that such instances were usually the culminations of a long series of degenerative processes, and that there was little hope of their being benefitted by any treatment.

In the course of the discussion which followed the reading of Dr. Wigginton's paper the difficulty of coming to a correct decision in all cases in which a physician was called upon to examine an alleged lunatic was referred to, and the suggestion was made that at least one hospital should be established to which all cases might be committed in the

first instance until the fact of insanity could be indubitably established or disproved. At present the physician is required to make his diagnosis under very disadvantageous circumstances, and it is occasionally at his peril that he gives an opinion.

At the meeting of the Society in 1884 a special committee was appointed for the purpose of laying the subject of "Expert Testimony and its Proper Compensation" before the legislature, and securing if possible the passage of a law upon the matter. Dr. Epley on behalf of that committee reported that all their efforts had resulted in failure, the legislators failing to see that there was any difference between the evidence of a man who chanced to see a street fight or to be the witness of a quarrel between neighbors ending in fisticuffs, and the evidence required from a skilled scientific observer.

A long and interesting discussion followed the presentation of this report, at the end of which it was resolved that a committee be appointed with power to assess the members of the Society in a moderate sum per capita for the purpose of raising a fund whereby the matter might be settled by making a test case for the Supreme Court. Dr. G. Fox offered to make such a case if the Society would agree to back him up, and Dr. McLeod expressed his willingness to do the same thing. At present there is no recorded decision in the United States upon the question whether a medical man can be compelled without compensation to testify to matters of opinion, but it is probable that the action of the Society will end in securing such a decision in the Supreme Court of Wisconsin.

Papers were read upon "Medical Humbugs, Regular and Irregular," by Dr. P. Berwig; "Koch's Cholera Bacillus and its Diagnostic Value," by Dr. A. B. Farnham; "New Remedies," by Dr. G. C. Stockman; "A Case of Periostitis," by Dr. G. H. Fox; "A Compound Fracture of the Ankle," by Dr. D. S. McArthur.

About twenty new members were admitted to the Society, among whom were four ladies, these being the first female practitioners ever elected to membership by this Society.

The Medical Society of Ontario being in session at the same time, telegraphic congratulations were exchanged, and communications were received from several other State Societies and from the American Medical Association.

By invitation of the Trustees and Dr. J. H. McBride, the Society visited the Sanitarium at Wauwatosa, a special train being placed at its disposal by the managers of the C., St. P. & M. R. R.

On Wednesday evening the resident physicians of Milwaukee entertained the Society at a banquet at the Plankinton House.

The officers elected for the coming year are: Dr. G. M. Steele, of Oshkosh, President; Dr. S. C. Johnson, of Hudson, First Vice-President; Dr. D. C. Davies, of Columbus, Second Vice-President; Drs. J. R. Barnett, of Neenah, T. P. Russell, of Oshkosh, and L. G. Armstrong, of Boscobel, as members of the Committee on Ethics, and Dr. N. Senn, of Milwaukee, as Censor. Dr. J. T. Reeve, of Appleton, retains the Secretaryship.

The city of Madison was selected as the place for the fortieth session of the Society, which will commence on the first Tuesday of May, 1886, and the Society adjourned, having held one of the most important and significant meetings in its history.

CORRESPONDENCE.

LONDON LETTER.

London, July 1, 1885.

Editor Review: In the estimation of Americans London holds a second rank to the Continent in the line of medical study. And yet in certain branches she is excellent and, the student interested in these would do well to spend a portion, at least of his time here. At the outset, London's very size is an objection, for it necessitates the placing of hospitals far from each other, and the loss of time getting from one to another is a serious drawback.

English students attach themselves to one medical school or hospital, for they are combined, and sees very little work in the other institutions, while a foreign graduate does not wish to confine himself so completely to one set of men, nor is there enough to occupy his time at one hospital alone. A clinic at one place in the morning spoils the forenoon for anything further, and the same of the afternoon. This refers to the general surgical and medical clinics. In the departments of the eye, orthopedic surgery and insanity the opportunities for seeing cases are excellent.

Moorfield's is probably the largest ophthalmic hospital in the world, and to my personal knowledge it draws cases not only from the whole United Kingdom, but from India and Australia. The material to be seen is vastly more abundant than in Vienna. The out-door patients arrive in the morning and are disposed of at six

desks, which they approach in files. Cases for ophthalmoscopic examination are reserved until later in the forenoon. About 11:30 the operating surgeons on duty for the day go to the operating room, and often ten or twelve operations are performed before the work of the forenoon is over.

Mr. Lawson is one of the leading surgeons, but the whole staff is composed of well-known ophthalmologists. The arrangements for students are better than formerly, but there is still room for improvement. There is no reason why it should not be made the leading ophthalmological school in the world. It is now, however, more adapted for those already possessing some knowledge of the subject. Soon following this in the afternoon comes the clinic at the Westminster Ophthalmic Hospital, which is a repetition of the morning's work on a smaller scale. Mr. Macnamara and Mr. Juler are probably the best known of the surgeons connected with this institution. This fills the day with very solid work from 10 A. M., until 4 P. M., and many consider the clinical advantages superior to the continent, but for pathology, special operative courses, etc., one must still go to Germany. It is to be hoped that the promised attempt to make these schools meet every want will be realized, especially in the interest of those who have little knowledge of German and who cannot afford the time necessary to learn it. The instruction to be obtained here in insanity and nervous diseases is excellent and well systematized. On paying a fee at the Bethlehem Hospital one is enrolled as a member of a clinical class which every morning makes the rounds of the institution with Dr. Savage. He lectures on different subjects, illustrating them with cases as he goes from one ward to another. In this way the student becomes not only acquainted with mental disease, but acquires a familiarity in the treatment of patients and a knowledge of institution management to be obtained in no way but by actual experience.

The course is systematic and extends over a certain length of time, at the expiration of which a certificate is given the student.

Orthopedic surgery is advantageously studied here, more from the abundance of material than from any superiority in methods or teaching. In fact, I think the subject is as far advanced, or farther, in our leading medical centers. The plaster jacket is not regarded with favor, nor is the principle of extension in hip joint diseases.

The clinics of the celebrated men are of course of unfailing interest. One of the most popular is that of Sir Joseph Lister. He is connected with King's College Hospital and his ideas of antiseptic surgery are vigorously carried out. Everything is done under the spray. Free drainage and elaborate carbolized dressings render interference with the wound unnecessary for from seven to ten days, when it is the rule, to which the exceptions are very rare, to find healing by primary union. A removal of a very large nævus was of special interest, from the difficulty of the operation and its dangerous position. The child, about five months of age, had a large and very vascular nævus extending from the lobe of the left ear to the clavicle and forward nearly to the median line, being bounded posteriorly by the sterno-cleido mastoid muscle. Injections with carbolic acid had been tried, but seemingly of no avail, though the specimen after its removal showed a hardness and shrinking at the points of injection which caused Mr. Lister to regret its abandonment. A cut anterior to the vascular portion and parallel with it was first made, keeping wide of the nævus and the edge carefully dissected up, the object being to find and ligate the vessels supplying it anteriorly before they had become divided into their numerous ramifications. The same method was pursued posteriorly, and finally the central vessel at the base secured. The carotids could be distinctly seen pulsating in the bottom of the wound. The operation had to be discontinued at one period to allow of the resuscitation of the child. Although so very vascular the growth was removed without the loss of more than two drams of blood, all owing according to the operator, to the method of cutting wide of the nævus and securing the nutrient vessels before their division. The wound though so extensive was closed by means of large silver sutures which Mr. Lister uses where there is to be any strain, as in removals of the breast. The wire is as large as that in use for ordinary probes. Mr. Bryant's clinic at Guy's Hospital is also largely attended. He is the chief exponent of the non-antiseptic method and Mr. Lister's chief opponent. Every day, of course, one may attend the clinic of some celebrated man and find it both of interest and value, but, as I said before, it takes a great deal of time, and where that is an object the student will find the continent more satisfactory, except perhaps in the branches referred to.

A. W. H.

ITEMS.

—The Pankrato-coccus.—We are sorry to hear of the failure of Professor Meandra, of Outopos, to make a successful cultivation of the pankrato-, or all-ruling coccus. The Professor hoped by successive cultivations to produce a microbe, which, while not dangerous to man, would prey upon and destroy all other organisms, and would thus act as a perfect anti-zymotic, or as the Pro-

fessor eloquently says: "Such an organism as would penetrate into the deepest tissues of the body and drag from his secret lair, unheeding his wild cries for mercy, the indefatigable bacillus—the, as it were, insect powder of the entozoa." The great difficulty appears to have been in getting a cultivation of just the right strength; either the animal experimented on died from the effects of the pankrato-coccus, or it died from the disease (anthrax, etc.) artificially induced. "It is evident," continues this profound thinker, "that had success crowned my efforts, all zymotic diseases would soon be banished from the land, and Epidemis with her vengeful sword would be no more; a daily dose of this elixir of life would steel the frame of man against all contagion, in spite of filth and filthy surroundings." The Professor seems to think that some hidden or only half revealed law of nature has interfered with his success; he is nobly continuing his experiments, but that he is not over-sanguine the following passages would seem to indicate. He says: "Perhaps we do not understand the bacillus; he is the mighty leader of innumerable hosts giving the law of cleanliness to all the world, and he stands ready with his inexorable bands to avenge his outraged rules. He laughs at man, who, hearing the distant rumble of the microbian drum hastens to clean up his streets and prepare for a siege; but the bacillus wars not with streets, but with man, and man may have been, for the previous ten years, preparing in himself the soil, the battle-field—the NIDUS for his implacable foe. Banish each bacillus with the proper antizymotic, but if you would exterminate his race, be clean—continually clean."—N. Y. Medical Abstract.

—Amateur Doctors.—Apropos of this subject, the London Globe remarks· "It is curious, when one comes to think of it, that people should be so exceedingly ready to set about the remedy of anything amiss in the system of either themselves or those about them. If a man's kitchen clock wheezes and whirrs a little, and presently begins to betray a difficulty in getting along, he will admit at once that he does not know what is the matter with the thing, and he will have the clock-man ordered in to attend to it. If his watch gets a little slow, and does not seem amenable to the regulator, he will not even run the risk of touching it here and there with a little sweet oil; or if his piano gets out of tune in only a note or two, he does not dream of investing three and sixpence in a tuning hammer and putting it in order himself. He does not understand the business, he will tell you, and might do more harm than good. But if his own internal mechanism beings to wheeze a little and to show symptoms of running down, if he himself feels somehow a little out of tune, it is very likely indeed that he will be quite confident that he knows all about it, and will forthwith resort to the family medicine chest or the nearest druggist. It may be argued that he probably knows more about his own interior than he does of the inside of a clock or a watch. On the other hand, he may have been studying his own constitution for thirty, forty or fifty years. Every man, it has been said, is a fool or a physician at forty, and there is just enough truth in the saying to make it plausible. But then the remarkable thing is that the amateur doctor is just as ready to prescribe for other people's constitutions as he is for his own. Give him ever so slight a hint of your symptoms, and he will at once prescribe for you. He knows, of course, that your mechanism is ten thousand times more intricate and delicate than that of any clock or watch, and it might occur to him, one would think, that in so intricate a machine similar symptoms might possibly arise from very different causes. Nothing of the sort occurs, however. 'Pains in your chest, eh?' Ah, indigestion, my dear fellow. I used to have that sort of thing terrily. Try a box of Quackle's pills. The finest thing in the world for indigestion.' "—N. Y. Med. Times.

—An Excipient for Potassium Permanganate Pills.—A correspondent of the Deut. Med. Zeitung recommends vaseline two parts, paraffin and white wax of each one part, to be melted together, and three parts of white bole to be added to the mixture when cold. The potassic permanganate, previously well powdered, is then added to the mass. The pill machine should be made of horn or wood.—London Med. Times.

Poem of the Occasion.—The following has been sent us by a delegate:

There was once a great medical meeting
To arrange to give Europe a greeting;
Said they all, Well, we guess
We can kick up a mess,
So each one for his State began bleating.

(Med. Rec.)

—If a saturated solution of hydrochlorate of cocaine in strong nitric acid be applied to the skin, instead of the painful smarting of the acid alone, a slight pricking sensation is the only sensory effect produced. An eschar is formed, but takes a longer time to appear than if the nitric acid be used alone. These results have been obtained by Messrs. Randolf and Dixon.—Pharmaceutical Journal.

—The Ephemeris recommends a solution of boric acid in the proportion of 0.5 per cent as the best preservative of solutions of cocaine.

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COCAINE IN THE MORPHINE HABIT.

After the many enthusiastic reports of the therapeutic qualities of cocaine, critical and careful ones are about due. The extravagant assertions of Freud and Pollack, that cocaine is an antagonist to morphine and an infallible cure of the morphine habit, are to be considerably modified, if the results of Erlenmeyer are correct.

Like many other therapeutic innovations the coca-treatment of morphinism originated in the United States in 1878. In the succeeding two years about sixteen cases of successful cures of the habit were reported. But since 1880 not a single report on this subject is to be found in American literature. Freud interpreted this fact by assuming that the method had become a firmly established and acknowledged one. Erlenmeyer, however, concludes, and correctly so, that the method of treatment by coca and its known preparations had been abandoned on account of its uselessness.

In order to test the efficacy of the cocaine-treatment, Erlenmeyer employed Merck's drug by hypodermic injection in two hundred and thirty-six cases. His results are contained in the Centralblatt fuer Nervenheilkunde, July, 1885.

The qualitative effects of cocaine upon morphine eaters was in all cases the same. The phenomena differed only in degree. The intensity of the manifestations does not depend on the size of the dose. On the contrary Erlenmeyer usually observed stronger, more marked effects from the smaller doses.

Erlenmeyer thus formulates his results:

First. Muriate of cocaine, when introduced in daily doses of one and two-third grains (0.1), does not affect the cerebrospinal system at all. Neither the centres of voluntary movement nor those of conscious sensation exhibited the slightest disturbance of function. There occurred neither spasm nor paralysis, neither psychical excitation nor sleep or stupor.

Second. In doses of one-tenth grain (0.005) or thereabouts, a paralyzing effect on the centres of the vascular system ensued. This vasomotor paralysis was manifest by increased frequency of the pulse, dilatation of the arteries, diminution of arterial tension, perspiration and elevation of temperature. The vascular paralysis was transient.

Third. Cocaine produced subjectively sensation of warmth, both local and of a more general nature. If the injection was made while the stomach was empty a disagreeable, almost painful, sensation of pressure and spasm in the epigastrium ensued. Following doses of one grain, or frequent repetitions of smaller amounts, there occurred disagreeable, harassing restlessness and sinking faintness.

All in all, Erlenmeyer is not much impressed or elated by his experiences. He states that many patients refused to continue the treatment because of the annoying symptoms above referred to. The patients, in whom cocaine was substituted surreptitiously for morphine, promptly discovered the deception.

Erlenmeyer says that while cocaine does modify and mitigate the so-called phenomena of abstinence, its effect is only transient and of brief duration. He regards the remedy as of trifling value as a substitute for morphine. The evanescent impression made and the high price of the drug prompt Erlenmeyer to discard its use. He prefers the cheaper, more reliable and more permanent agents that have heretofore been employed.

Dr. Ferran and the French Commission.

The excitement over the cholera-inoculations in Spain is still running high and it appears difficult to get at the true inwardness of the process and exact data of results are not attainable. The reports are characterized by the proverbial Castilian exaggeration and high coloring. The advocates of the doctor are seized with the latest form of mental malady, Ferrano-mania. In France, Belgium and Germany much scepticism prevails. The Belgians delegated a commission consisting of acknowledged mycologists, van Ermengem among the number, to study the matter. We have not learned how they succeeded but hear through La Semaine Médicale, July 8, 1885, that a French Committee of Investigation was very shabbily treated, "bluffed off" in fact. The German government has decided not to carry out its plan of sending experts; all on account of the incredible and manifestly false expressions of Ferran and his tribe. The Berliner Klinische Wochenschrift hears from its correspondent in Madrid the following astounding news:

"Inasmuch as the inoculation of attenuated virus is followed by fever in man after about four hours, it was determined to try the effect of inoculations made in the algid stage. It is asserted that this was done in three cases, that fever ensued promptly, and that the patients were saved." Such claims must create grave doubt. The Wochenschrift comments very correctly that even should this statement be true, there are easier means of inducing fever than the troublesome painstaking process of first obtaining a cultivation of the "Peronospora Ferrani."

But to return to the French Committee, its labors and its report. After the telegraphic and epistolary effusions regarding Ferran's operations one would have been almost ready to accord Ferran the renown of a Jenner or a Pasteur. The French Committee however shows this pompous glory to consist of very unsubstantial stuff and gives Dr. Ferran an unenviable notoriety.

On June 16 a special committee was appointed by the French Minister of Commerce to visit Dr. Ferran's laboratory and there pursue the study of the process. The committee was composed of Dr. Brouardel, of the Faculty of Paris, Dr. Roux, an assistant of Pasteur, and Dr. Albaran, a rising, young mycologist of Paris. They went provided with the latest apparatus necessary for the cultivation and examination of the microbe and had a letter of recommendation from Pasteur. In this letter the great Parisian savant formulated the points to be settled by the committee.

They expected to meet in Dr. Ferran a disinterested scientific investigator, to be classed with Koch and Pasteur, who never had hesitated a moment to give to the world at large the results of their labors. They were sadly disappointed. Ferran declared that he would not make known the process of attenuation; that not a drop of the fluid could be taken by the committee from his laboratory. He proposed that the committee gather cholera-dejecta, make a pure culture therefrom and hand him a flask containing such pure culture. He would attenuate this fluid in three days; the committee, however, was not to be allowed to follow up the various steps in the procedure. The committee might subsequently perform inoculations with the fluid that would be returned them. The committee was taken completely by surprise by this unreasonable proposition and the air of secrecy on the part of Ferran. Their astonishment was complete when the Spanish doctor cooly remarked: "I propose to keep my secret. If I let it out you get something for which I myself get no return." Such wariness is certainly commendable in a business man, but is unbecoming a scientist. Notwithstanding the solicitations and arguments of the committee the doctor remained obdurate. The comittee declined to operate with a fluid the character of which was entirely unknown to them. And thus their mission came to a sudden termination.

Ferran wrote to the French Minister of Commerce in explanation of his peculiar behavior, that he had to sacrifice a lucrative

practice in his endeavors to find a prophylactic of cholera; he, therefore, deems himself entitled to a compensation for his work; that Spain does not, like France and Germany, provide for its scientific investigators and endow laboratories for the pursuit of such work; on the contrary, that he was subject to ridicule and to annoying interference on the part of the governmental authorities. In other words he desires to be considered as of the same category as other inventors of cure-alls and nostrums, and wants to be treated in accordance with patent medicine regulations and usages.

The committee rendered a report to the Academie de Médicine and detail the primitive character of Ferran's equipment. He has poor apparatus and microscopes; he could not demonstrate the various morphological phases of the baccillus that he has described. He gave the very thin excuse that at the time he had no cultures in which these various changes and details could be shown, and he was obliged to confess that he had not preserved one single specimen. His experimentation on animals must be of the crudest description; he had no animals under observation that had been inoculated and none were visible that might serve such a purpose.

From information collected the Committee states that numerous variations occur in the phenomena induced by the inoculations and that the microbes are of no definite morphological character.

The fact is also alluded to that the inoculations are carelessly performed; no antisepsis or sterilisation of the instruments is practiced.

The Committee sums up by asserting:

That a true knowledge of the nature of the alleged and so-called attenuated cholera virus is impossible, by reason of Dr. Ferran's refusal to permit a fair and critical study.

That his (Ferran's) views as to the morphology of the microbes are vague and fantastic and changeful.

That his apparatus is entirely inadequate, in fact unfit, considering the difficulties and requisites of bacteridian study.

That his inoculations in man and animals fail to develop any of the symptoms of any recognized form of spontaneous mitigated cholera. The Committee also state that while the inoculation seem to be harmless, the truth is not easily gotten at by reason of the gross imperfections of Spanish vital statistics and the manifest desire in certain quarters to manipulate and alter returns.

From the above our readers get a pretty clear idea of the true value of Ferran's experiments. It is not to be supposed that the report of the Committee is a wilful misrepresentation. If Ferran is a fraud it must come out. His only vindication can be success, and late reports from Spain do not show any.

Antipyrine in Sunstroke.—Benjamin F. Westbrook, M. D., physician in chief to the department of diseases of the chest, St. Mary's General Hospital, Brooklyn, publishes a note in the New York Medical Journal calling attention to the use of antipyrine in two cases of sunstroke, so that others may, if they think proper, test it and contribute the result of their experience. We report his experience for the especial regard of those, such as our dispensary physicians, that are at present handling so many such cases.

It occurred to the doctor that the prompt introduction of an antipyretic dose of this substance into the subcutaneous tissues might be of great service in reducing the temperature, and so give time for attention to the treatment of the other pathological conditions. The ambulance surgeon, Dr. Folker, was therefore requested to provide himself with a fifty per cent solution, and, in the event of his being called to a case of the apoplectic form of the disease, to administer a drachm of the solution hypodermically at once, and to repeat it in an hour, if the temperature was not markedly reduced. Other measures for the relief of the patient were, of course, not to be neglected.

On Saturday, the 18th, when the thermometer registered 99° F. in the shade, he was called to attend a young Englishman, twenty-

two years old, of very robust habit, who, after working out of doors all the forenoon, became comatose and convulsed after reaching his home at midday. The head was congested, eyes suffused, pulse rapid and strong, skin dry, and the coma profound. The bowels had moved spontaneously, and he had vomited freely. The rectal temperature was 109° F. The doctor administered a drachm of the fifty-per-cent solution of antipyrine hypodermically, applied ice to the head and removed him to the hospital.

In the confusion attending his admission the exact time was not noted, but in about three-quarters of an hour after the first dose the rectal temperature was 107.50° F. Cold was applied to the body and head by means of towels wrung out of ice water and frequently changed; and another drachm of the solution was introduced under the skin. In thirty minutes the rectal temperature was again taken and found to be 99° F. The cold applications were at once discontinued and dry heat was applied to the surface, while whiskey was injected subcutaneously. An abstraction of blood was made and chloral given.

This case represented the severest type of sunstroke. The temperature was high, the coma very profound, and the convulsions the most terrible. The rapid and permanent reduction of temperature, which must have been mainly due to the antipyrine—inasmuch as the cold applications were only continued for half an hour—undoubtedly contributed toward the favorable result by giving time and removing at once the injurious effect of the hyperpyretic blood upon the higher nervous centers. The beneficial effect of the abstraction of blood was evident.

The second case was brought in an hour or two after the first. The patient, an Italian laborer, had been engaged in some laborious work. He became suddenly unconscious, had well-marked convulsions, and voided his excrement involuntarily. He was comatose, breathing irregularly, with rapid and tense pulse, suffused conjunctivæ, dry skin, and continual convulsive twitchings of all the voluntary muscles. The rectal temperature was 110° F. The doctor gave him a hypodermic injection of one drachm of the 50 per cent solution of antipyrine, applied ice to the head and brought him to the hospital. On his admission he was comatose. The surface was cool; the pulse was 120, as nearly as it could be counted, with marked tension and a laboring stroke of the heart. The respiration was rendered irregular by the continued spasmodic movements of the voluntary muscles.

The convulsive movements of the limbs were very peculiar in that they were rhythmic in character, and most readily likened to those of a man pulling upon a rope. The rectal temperature, thirty-five minutes after the administration of the hypodermic injection containing one half drachm of antipyrine was 101° F.

No cold applications were used in this case, with the exception of ice to the head. He was given, by enema, four ounces of whisky and thirty grains of the hydrate of chloral, and retained it.

After a time he became quiet, the convulsive movements almost entirely ceased, and consciousness became dimly perceptible. But, upon changing him to another bed, the peripheral irritation threw him into an active tetanic convulsion, which, however, soon subsided spontaneously. It was noted afterward that any pronounced peripheral irritation would produce convulsive movement. After an hour he received another half-drachm dose of chloral hydrate, with two ounces of whisky, per rectum.

He also received a drachm of Lente's solution of quinine about once in two hours. On Sunday morning he was quite conscious. The temperature was 99° F. He was ordered 20 grains of the bromide of sodium every two hours and 3 grains of quinine every four hours. On Monday his condition was still better, his mind, apparently, quite lucid, and his desire to move about and partake of food very decided. The bromide and quinine were continued.

Dr. Westbrook concludes: "The favorable termination in both of these cases is signifi-

cant, as they were both accompanied by great hyperpyrexia and signs of a most profound vital disturbance. The first case was, probably, slightly injured by the use of cold applications too long continued, but this was quite excusable on the part of the house staff, as they were dealing with a new remedy, and had been advised not to neglect the old ones. The result in the second case would seem to strongly indicate that, where antipyrine is used, the external application of cold is not necessary. Another interesting observation was that, when the temperature declined, the cerebral symptoms still continued. This might indicate that even a short period of such intense heat and arterial excitement may so benumb the vaso-motor apparatus that several hours are required for recuperation.

If this is the correct inference, an agent like antipyrine, which is capable or reducing the temperature quickly, may be of the utmost importance.

But, of course, further observation is necessary before any positive conclusion can be drawn. From our experience so far, I should say that half a drachm of the drug would be sufficient to accomplish the purpose. A 50 per cent solution is easily made, and when injected beneath the skin, produces very little irritation."

Hydrastis and Hydrastine Hydrochlorate in Diseases of the Skin.—Dr. John V. Shoemaker, of the Jefferson Medical College of Philadelphia, writes in Drugs and Medicines of North America, a quarterly devoted to the Historical and Scientific Discussion of the Botany, Pharmacy, Chemistry and Therapeutics of the Medicinal Plants of North America, as follows: Hydrastis is a valuable drug in diseases of the skin, both internally and as a topical application. It is especially useful as a stomachic tonic, and as a hepatic stimulant in cutaneous affections depending upon gastro-intestinal disorders.

It is best administered in the form of the fluid extract of hydrastis which Prof. Roberts Bartholow has shown to contain all the constituents of the drug and is the preferable preparation to use. In seborrhœa sicca or oleosa, which frequently develops from some alimentary trouble, the scaly, reddened or greasy state of the skin may lessen or disappear by the use of ten or twenty drops of the fluid extract of hydrastis three times daily. The red or white of papules, black points or pustules of acne or the enlargement of the blood vessels and tissue of acne-rosacea due to the same cause may alone be relieved or cured by the internal administration of hydrastis. It is an excellent remedy to use in scrofulous diseases of the skin, in patients having feeble digestion, loss of flesh and enlarged glands, with or without unhealthy ulcers. In cases of this nature it will stimulate the appetite, lessen the involvement of the skin and assist the action of local medication in removing the disease. It has also acted in a happy manner upon some cases of lupus, sycosis, boils, carbuncles and ulcers, in which the local condition was largely due to a lack of nutrition of the system. Eczema which is so often depending upon debility or some gastro-intestional disorder, may at times be greatly relieved or cured by free doses of the fluid extract of hydrastis.

In children suffering with the pustular form of this disease, known as eczema impetiginodes or milk crust, small doses of the fluid extract, from one to five drops in mucilage or glycerine three times daily, increases the digestive power, lessens the formation of pus, and has a powerful tonic action upon the previously enfeebled system. In broken down syphilitic subjects, especially in those in whom the alimentary canal is weak and irritable, often from alcoholic excess, or from the use of too much mercury or one of the iodides, the use of hydrastis is attended with most marked and beneficial results.

Hydrastis may be employed alone internally or in some cases its conjoined internal and external use will at times be found most efficacious. The range of usefulness, however, as a topical application, is even greater than from its internal administration. The fluid extract, which is the preparation generally employed for local use, has both a stimulant

and an astringent action on the integument which is well marked when the skin is denuded or inflamed. It may be used undiluted, or what is even better, diluted one-half or one-third with water, oil, mucilage or glycerine. Inflammatory affections of the mucous membrane, especially stomatitis, syphilitic lesions, and eczema are greatly benefited or even at times removed by the application of the fluid extract of hydrastis. The fissured form of the latter diseases which occurs around the mucous outlets, as on the lips and about the anus, or on the flexor surfaces and between the fingers and toes are sometimes rapidly improved by its use. It also exerts a most efficacious action and lessens the inflammation and thickening in chronic eczema, whether involving the parts just referred to or other regions. Abrasions, sinuses, ulcers and granulations are greatly improved by the application of this remedy.

While the use of the fluid extract of hydrastis has been attended with much benefit in many of the diseases just cited, yet its employment has been open to a very great objection from the staining which follows in everything with which it comes in contact. This staining power which is usually imparted to the clothes of patients, is not easily removed even by washing, and the unpleasant effect that follows the employment of this drug would almost entirely preclude its adoption in private practice, when so many other, elegant, cleanly and efficacious preparations are now constantly on hand for use. Fortunately, however, the objection referred to has been entirely overcome by the recent investigations of Prof. Bartholow, who has demonstrated the active principle of the drug hydrastine, which can be combined to form hydrastine hydrochlorate, which has all the physiological effect of the former drug. Further, the salt so formed not only possesses all the good qualities for cutaneous application, claimed for hydrastis, but it is also perfectly free from the staining qualities of the latter drug.

Hydrastine Hydrochlorate.—This salt occurs as a fine white powder slightly tinged with yellow, inodorous but very bitter and soluble in water, alcohol, oils and fats. Its color, its odorless character, and its great solubility furnishes a remedy of unusual advantage for topical application in diseases of the skin.

During a short experience with this preparation I have found it most useful mixed with water, alcohol or fat in hyperidrosis, seborrhea, acne, eczema and in ulcers. Thus from five to twenty grains of hydrastine hydrochlorate to the ounce of alcohol, has a most beneficial effect on excessive secretion which may occur in the axillary or inguinal regions, or on the palmar and plantar surfaces. This same combination acts well in seborrhœa sicca, especially of the scalp, attended with loss of hair, the stimulant and astringent action of the solution lessening or relieving the irritabilty of the follicles and glands of the part. The papules and black spots of acne yield sometimes very rapidly to the application of the alcoholic solution of hydrastine hydrochlorate. Acne rosacea and seborrhea oleosa or the greasy state of the skin so often seen in the face of young women have in several instances improved much on an application of an aqueous solution of this drug, or a mixture of the salts with a fatty substance in the proportion of from five to twenty grains to the ounce.

The ointment of hydrastine hydrochlorate, the salt being incorporated in the fat in from ten to sixty grains to the ounce, has proven a most excellent application in some cases of subacute and chronic eczema; the thickened and irritable state of the skin in the latter condition subsiding at times very rapidly on its application. It has also been serviceable in some scrofulous and varicose ulcers used in the form of an ointment. The good results so far realized from the topical application of hydrastine hydrochlorate may be illustrated by the following cases in which it has been employed in the clinical service of the Philadelphia Hospital for Skin Diseases.

Acne.—Robert T. æt 17. Forehead, cheeks and chin covered with small red papules associated with black points—acne punctata—and

papulo-pustules, digestion feeble, bowels torpid. Ten drop doses of the fluid extract of hydrastis were given three times daily before meals and the face was sponged night and morning with an aqueous solution of hydrastine hydrochlorate containing ten grains of the salt to the ounce. In ten days the patient showed signs of improvement, and in six weeks after being placed under treatment he was discharged cured.

Eczema of the face.—Anna B. æt 3. Scalp and face covered with thick crusts, which upon removal exposed red raw and infiltrated patches, digestion poor, constipation at times followed with diarrhœa. Half a drop increased to a drop of the fluid extract of hydrastis was administered in milk three times daily with the effect, in course of twelve days, of improving the child's general condition and lessening somewhat the local inflammation. The red and infiltrated patches still remained stubborn, notwithstanding the use of the ordinary ointments. At the end of the second week of the constitutional treatment, one ounce of lard with twenty grains of hydrastine hydrochlorate was used freely over the parts. The red and thickened patches gradually disappeared and in two weeks time from the beginning of the topical application only a slightly desquamating surface remained.

Eczema of the Anus.—James T. æt 32. Had been under treatment at various times with only temporary relief. The margins around the anus were thickened and fissured, many of which extended well into the mucous membrane of the parts. No apparent exciting cause could be detected. The application of the ointment of hydrastine hydrochlorate twenty grains of the salt to the ounce being employed was followed by relief within a few days. Several weeks have now passed and the patient having failed to report has doubtless obtained permanent relief.

Eczema of the Ears.—Mary W. æt 27. The right and left ears were red, somewhat thickened and covered with scales. The skin back of each pinna was in a similar condition with several fissures at their connection with the side of the head. The inflammation of the ears had originally been excited by a dye, and had resisted the usual local remedies. The ointment of hydrastine hydrochlorate, of the same strength as mentioned in the previous case, was used with good effect within six days. The ears in about three weeks had acquired their natural size. The fissures healed quickly, and when last seen, about ten days ago, only a little roughness of the integument was apparent.

Eczema of the Feet.—Mrs. G. æt 36. The dorsal surface of both feet were red, slightly infiltrated, especially about the toes, between which were some well marked fissures. The disease had been in existence for some time and had been caused by using some remedy to remove corns from the feet. At first, a five, and afterward, a ten per cent. ointment of hydrastine hydrochlorate was usde which completely removed the disease in from five to six weeks time.

Seborrhea Sicca of the Scalp.—Wm. S. æt 22. The scalp was caked over with a thick sebaceous secretion. the hair being dry and lustrous. The disease had followed after typhoid fever. The patient at the time of examination was weak and poorly nourished. Cod liver oil in large doses soon improved the systemic condition, but the local trouble continued the same. The parts were sponged once daily with an alcoholic solution of hydrastine hydrochlorate, thirty grains of the salt being employed to the ounce with the effect of removing within eight or ten days all the crusts and scales, and after some three weeks topical application but a slight evidence of the disease existed.

Inflammation of the hair follicles of the beard.—Thomas R. æt 24. The upper lip was the seat of many pustules and papules, especially around the margin of the anterior nares. Two grain doses of the iron iodide was administered and a ten per cent. hydrastine hydrochlorate ointment applied to the parts brought relief within six or eight days. The patient then disappeared and has not since reported.

Seborrehea Oleosa.—Maggie C. æt 19. Forehead, cheeks and nose slightly red and

very greasy. Many of the follicles of the parts were plugged with comedones, and the skin in patches presented even a dirty hue. A uterine cause which excited the disease had been removed by one of the physicians at a general hospital, but the local condition, although lessened by the previous treatment, continued annoying. An aqueous solution of first five and afterwards twenty grains of hydrastine hydrochlorate to the ounce lessened the poured out oily fluid and improved decidedly the deformity of the skin in about two weeks time. Patient has since ceased her visits to tbe hospital and perhaps has concluded she is now cured.

Hyperidrosis.—Mrs. L. æt 39. Applied for the relief of excessive sweating from the arm pits, which has been very annoying for some time. Health good and local trouble could not be traced to any constitutional cause. The frequent use of an aqueous solution containing thirty grains of hydrastine hydrochlorate to the ounce proved an effective application within a few weeks time.

Ulcers.—Carrie H. æt. 13. Had two small ulcers, one on the right and the other on the left side beneath the inferior maxillary from broken down lymphatic glands. The floor of the ulcers were covered with indolent granulations and with an unhealthy and scanty pus. Constitutional treatment improved without removing the ulcers. A ten increased to a twenty per cent. hydrastine hydrochlorate ointment healed them completely in a little over one month's time.

Hydrastine hydrochlorate from the cases just cited and others now improving under its use will no doubt prove a valuable topical application, especially in diseases of the skin. Its stimulant and astringent properties may make it available, not only in the affections alluded to, but also in many others. From present experience it is better adapted for use in diseases in which the inflammation is not too active, more particularly in the subacute and chronic stages. Precaution should be exercised in using it on an acute eruption and if employed the solution or ointment should be very weak otherwise the active stimulant and astringent effect of the salt may increase instead of diminish the disease. It is better and much more effective even in those diseases in which it is indicated not to use too strong a solution or ointment in beginning the application to the skin.

Treatment of Ozena.—In the Deutsche Medicinische Wochenschrift, January, 1885, is contained an article to which the London Practitioner refers:

"Dr. Loewenberg, of Paris, diagnoses ozena by the inspection of the nasal cavities anteriorly and posteriorly, and by the microscopic examination of the secretion. The chief characteristic disclosed by inspection is the atrophy of the mucous membrane of the turbinated bones, causing an increased width of the nasal cavities, no ulcerative process being concerned in the production of the affection. Peculiar micrococci are found in the secretion, always large in size, and with a tendency to form into chains, and to exist in pairs; but in the unmixed secretion Dr. Loewenberg has never found any other kind of organism, except in one case of a child, æt. 8 years, where bacilli were constantly present. The secretion was alkaline in all cases except the one just mentioned, where it was neutral. Dr. Loewenberg believes that ozena can proceed only from an already existing case, when the germs given off meet with a suitable field in which to multiply, and the rarity of the affection shows the necessity for some form of predisposition. The general poor health of persons suffering from ozena is referred to the effects of breathing constantly the air poisoned by the foul secretion, and of swallowing the secretion itself. Dr. Loewenberg points out the rarity with which aural complications arise in ozena, peculiarly interesting in presence of the fact that the opening of the Eustachian tube is especially exposed in consequence of the atrophy of the turbinated bones. He prefers the name "ozena" to the longer and really incorrect one of "rhinitis chronica atrophica fetida," contending that it describes the affection beyond possibility of confusion, and that ordinary ozena may

be distinguished from syphilitic by the designation "simple" in contradistinction to "true." The forms of treatment which he recommends are the nasal douche and the nasal bath, both consisting of a very weak solution, 1 in 1000 to 1 in 700, of corrosive sublimate, the douche being administered carefully and gently with a syringe, and the bath serving to supplement the douche for the upper part of the cavities. As a more permanent disinfectant, some antiseptic powder, such as boracic acid, should be blown into the nostrils; care being taken during its aspiration, as also during the douche and bath, to close the larynx against its entrance by saying "ah," or by breathing through the mouth. The results of even this treatment may, however, only be palliative if the disease has made much progress before coming under treatment."

Contra-indications to Mercury in Syphilis.—At the recent meeting of the British Medical Association, A. Cooper, F.R.C.S., read a paper on syphilis (New York Medical Record). After pointing out the great value of mercury in the treatment of the disease, and the necessity for prolonged courses of the drug, he draws attention to the contra-indications, which many physicians are apt to overlook or to neglect. Mercury should not be given to phthisical subjects, unless the chest affection is slight and the patient's health is good in other respects. When albuminuria exists mercury must, of course, be withheld, unless there is reason to believe that the renal affection is due to syphilis. When syphilis exists in scrofulous subjects, if the symptoms of scrofula are not very severe, mercury may be given with care in small doses. Mercury is contra-indicated in profound anemia, when non-specific. The least symptom of sloughing or phagedena should prevent any thought of administering mercury. If any of these complications set in during a course of the medicine, it should be at once discontinued. Alcohol and tobacco should be avoided or used sparingly during a course of mercury. Exercise and fresh air tend to prevent salivation, and the skin should be kept perfectly clean. Confinement to the house is desirable when any eruption appears.

Uses of Traumaticine.—A Lagorio reports in the Chicago Medical Journal and Examiner:

"Dr. C. Costa calls attention in La Salute to the beneficial effects obtained by traumaticine in many cutaneous diseases, such as psoriasis, pityriasis versicolor, scrofuloderma and lupus erythematodes.

To Auspitz of Vienna belongs the credit of the introduction of this remedy and the indications for its uses. Traumaticine is a solution of one part of gutta-percha in ten parts of chloroform. It is a syrupy liquid, smells strongly of chloroform, and has a color and consistence according to the quality of gutta-percha used; of this there are three qualities. The brown is that which is most abundantly found in commerce. It dissolves with greater difficulty. It dries more slowly, but preserves its elasticity longer. The red is that used by dentists. It dissolves more readily in the proportion of ten per cent and also of twenty per cent; it forms a liquid of rosy color, and it is to be applied to exposed parts of the body, as the face, hands, etc. The white dissolves quickly in chloroform in the proportions of ten to twenty per cent.

These solutions when applied to the skin easily penetrate in every fold and irregularity, and thereon dry with moderate rapidity. They form a thin adherent pellicle, white, rosy or brown according to the quality of the gutta-percha. The traumaticine folds and bends according to the movements of the skin, without breaking or detaching itself, and without causing any pain, compression or excessive stretching. Numerous remedies can be suspended in it according to their indications, as crysarobin at ten per cent or more, as also sulphur, iodoform, salicylic acid, boric and pyrogallic acid and other substances.

For the first time it has been used by him in the treatment of acute blenorrhagic epididymitis, applied in layers externally. Be-

fore applying it, the scrotum is to be shaved, and ice is to be applid to it for half an hour so as to contract it and reduce its size. By this method the swelling has rest, protection and compression, and rapidly disappears.

Costa praises the applications of trumaticine as the best remedy in these disorders."

CONTRIBUTION.

TYROTOXICON—CHEESE POISON.

ABTRACT OF A PAPER BY PROF. V. C. VAUGHAN, M. D., PH. D.

At the meeting of the Michigan State Board of Health, July 14, 1885, Dr. Vaughan presented a report of his investigations on poisonous cheese. It is well known that cases of severe illness follow the eating of some cheese. Such instances are of frequent occurence in the North German countries and in the United States. In England they are less frequently observed, while in France, where much cheese is made and eaten, these cases are said to occur very rarely. A few years ago the reputation of a large cheese factory in northern Ohio was destroyed by the great number of cases of alarming illness arising from eating its cheese. Dairymen know this cheese as "sick" cheese.

Kinds of Cheese that are Poisonous.

A German author says: "The numerous kinds of soft cheese prepared in small families, or on small farms, are generally the cause of the symptoms; while it is quite exceptional to hear of symptoms arising from the use of cheese prepared in large quantities." Some two years ago a family in Alpena, Mich., was poisoned by eating of cottage cheese; but the cheese which poisoned so many in this state last year was made at one of the largest factories in the state, and by a thoroughly experienced cheese-maker. The old foul-smelling cheese, such as Limburger and Schweizer, have never been known to be poisonous.

Effects of the Cheese.

The symptoms produced by "sick" cheese, as reported by German and American physicians, agree quite closely and are as follows: Dryness of the mouth and throat with a sense of constriction, nausea, vomiting, diarrhea, sometimes double vision, and marked nervous prostration. In rare instances the sufferer dies from collapse. As a rule recovery occurs in a few hours, or at most after a few days. The symptoms of cheese-poisoning and those of sausage, canned meats and fish poisoning are very similar, though death results more frequently from the others mentioned than from cheese-poisoning.

Appearance of the Cheese.

The samples of cheese examined had no peculiarities of appearance, odor or taste by which it could be distinguished from good cheese. It is true that if two pieces of cheese—one poisonous and the other wholesome—were offered to a dog or a cat, the animal would select the good cheese. But this was probably due to an acuteness of the sense of smell possessed by the animal and not belonging to man. Indeed, if a person tasted a cheese knowing that it was poisonous, he might detect a sharpness of taste which would not ordinarily be noticed.

Have we Any Ready Means of Recognizing Poisonous Cheese.

There is no certain means aside from a chemical examination, by which a poisonous cheese can be distinguished from a wholesome one. The most reliable ready method is probably that produced by Dr. Vaughan a year ago, and it is as follows: Press a small strip of blue litmus paper (which can be obtained at any drug store) against a freshly cut surface of the cheese; if the paper is reddened instantly and intensely the cheese may be regarded with suspicion. When treated in this way any green cheese will redden the litmus paper, but ordinarily the reddening will be produced slowly and will be slight. If the piece of cheese be dry, a small bit should be rubbed up with an equal volume of water, and the paper should then be dipped in the water. Dr. Vaughan does not regard the above test as free from error, but as the most reliable ready means now known. Every grocery-man should apply this test to each fresh cheese which he cuts. The depth of the reddening of the paper may be compared with that produced by cheese which is known to be wholesome.

Effects on the Lower Animals.

Dogs and cats, at least, are not affected by eating poisonous cheese. This is probably due to the fact that they do not get enough of the poison from the amount of cheese which they eat. The pure isolated poison in sufficient doses would undoubtedly produce upon the lower animals effects similar to those produced on man.

Nature of the Poison.

Dr. Vaughan has succeeded in isolating the poison, to which he has given the name tyrotoxicon (from two Greek words which mean cheese and poison.) It is a product of slight putrefaction in the cheese which probably occurs in the vat, as the curd has been known to poison a person. By this slight putrefaction, or excessive fermentation as it may be called, a large amount of butyric acid is formed, and this in the presence of the casein of the cheese is capable of developing a poison. Different samples of poisonous cheese contain different amounts of the poison. The same weight of cheese from one cake furnished three times as much poison as that from another cake. The poison was obtained in long needle-shaped crystals which are freely soluble in water, chloroform, alcohol and ether. The smallest visible fragment of a crystal placed upon the end of the tongue causes a sharp stinging pain at the point of application, and in a few minutes, dryness and constriction of the throat. A slightly larger amount produced nausea, vomiting and diarrhea. The poison is volatile at the temperature of boiling water and for this reason even poisonous cheese may be eaten with impunity after being cooked. The substance has also a marked, pungent odor, and through the nose one can obtain sufficient of the volatile poison to produce dryness of the throat. This is true, however, only of the isolated poison. In the cheese the taste and odor of the poison are both modified to such an extent that they would not be recognized as has already been stated.

The first step in the study of cheese-poisoning has now been taken, by finding out what the poison is. Efforts will be made to ascertain the means for preventing its formation.

CLINICAL LECTURE.

A CASE OF CATARRHAL PNEUMONIA.

A Clinical Lecture delivered at the New York Hospital.

BY WILLIAM H. DRAPER, M. D.,

Professor of Clinical Medicine at the College of Physicians and Surgeons, New York.

REPORTED FOR THE REVIEW.

History.—M, aet. 29; native of Canada; married. Was admitted yesterday evening. Family history unimportant. No specific disease, rheumatic or malarial fever. Is a very temperate man, regular habits; was in good health until Tuesday a week, when he got a heavy cold. Soreness over left chest, cough and fever, sweating, no chill at that time, no diarrhea. Patient, however, kept about until last Friday when he had a chill. Felt very ill. Had a cough at this time, accompanied by expectoration. Pain and soreness over left shoulder greatly intensified. Never expectorated blood. Had considerable ardor urinæ. Passed urine in very small quantity. Complete anorexia. Complains a great deal of thirst. Pain has rotated to left side in the groin toward umbilicus. Patient applied a mustard plaster in this region; also put oil silk jacket on the chest. During past two or three days suffered from dyspnea, which has been on the increase and became extreme on the evening of admission. On admission pulse 118, resp. 24, temp. 103.6°, Urine contains neither albumen nor casts.

Gentlemen, you have heard the history of this case. As you observe, the history is not a perfectly clear one of a pneumonia, beginning at the commencement of his illness. He was taken sick nearly two weeks ago, not with chill, but with fever and chest oppression, but he kept at work, going about coughing a little bit and complaining of malaise until last Friday, when he had a chill with sharp pain in the side, and with pain which was refered to the umbilicus. He went to a doctor who put a plaster on him, and an oil silk shirt, and told him that he had either pleurisy or pneumonia. The course since Friday has been the history either of an acute attack of pleurisy or of a pneumonia, and when he came in last evening he was suffering from an edema of the lungs which required immediate attention. Having recovered from this he was subjected to a physical examination, and the signs which are discovered to-day were found, i. e., signs of consolidation of the lung. Posteriorly the dullness extended from the spine of the scapula downward to the base of the chest, around into the axillary portion and in front as high up as the fifth rib. Now, over that dull region there was not a perfectly clear, distinct, bronchial respiration, but a distant bronco-vesicular murmur, with bronchial voice; but the signs were not so distinct as those of a complete condensation. The house physician thought of the possibility of the signs being due to pleurisy, and he introduced a needle into the space to such a depth as to make sure that he had it within the pleuritic cavity, but found no fluid. Hence, the conclusion was, that the physical signs were due to a circumscribed or limited pulmonary condensation rather than to a cir-

cumscribed pleurisy by means of circumscribed effusion. We sometimes have pleuritic effusion confined within certain limits which go by the name of circumscribed pleuritic effusion. These are due to the fact that the effusions take place between the costal and pulmonary pleuræ, and are limited by adhesions, so that we may have anywhere in the chest, on either side, a collection of fluid limited by pleuritic effusions so as to constitute a limited area of serous effusion. The reason that the doctor suspected this circumscribed pleurisy was the absence of the auscultatory evidences of the condensation which is due to pneumonia. Of course the absence of fluid as indicated by the syringe is a crucial test.

Now, how do you explain this case? It is not a case evidently of croupous pneumonia. It is a case similar in its origin and history to the one that I showed you in the other wards some time ago; a case in which the pneumonia, which was perfectly characterized when you saw the patient, was preceded by just such a period as preceded the evidences of pneumonia here, i. e., the man had for ten days or more a bronchitis which he neglected, and which terminated finally in this catarrhal pneumonia; a pneumonia which ran a limited course, terminated on the eighth day and which was very severe so far as the subjective signs went, i. e., the man had a very high temperature, a very heavy delirium and for some days was gravely ill. This man, since he came in, hada temperature of nearly 104°. To-day at 2 o'clock 103.8°; at 3 P. M. 103.2°; pulse 120; resp. 24; the expectoration is characteristic. We don't get that characteristic bronchial respiration and broncophony in this case that we would get in the case of croupous pneumonia, where the air-cells are filled completely and distended with the production of pus; but you get a condensation from partial filling of the air-cells. There is absence of respiratory murmur. There is what Dr. Flint has called the broncho-vesicular murmur, i. e., a mixed kind of murmur; not purely a bronchial murmur, and certainly not in any respect vesicular, but a sort of a distant bronchial respiration which is midway between the intense respiratory and a pure bronchial murmur.

Now, there is another point to which I wish to call your attention. You see that this man is a good deal oppressed in his breathing, though not breathing very rapidly. His face is pretty red and I have no doubt that he suffers constantly from that most suffering sensation, namely, want of breath. The reason of that is, that the breathing spaces are impaired. He does very little breathing of any account, practically, with the left lung; his work is chiefly done with the right lung. He is a good deal embarrassed and labors for his breathing. His cough and expectoration are such as indicate this congestion, giving rise to an edematous condition, perhaps, of both lungs. His pulse, at the wrists, is very good, not strong and compressible, but regular and steady; the first sound, as I listen by the stethoscope, is feeble.

Now, when we take into consideration his breathing and the character of his pulse, it is evident that he demands special attention to these symptoms. You have got to stimulate him in order to help his heart to overcome the pulmonary embarrassment. He gets an ounce of spirits and gtt. x digitalis every two hours. His breathing is a good deal better than it was; his mind is perfectly clear; his brain is apparently well nourished yet; he has no delirium as the other patient had, and is doing very well. The attack is one which demands very strict and watchful attention; for these are the cases in which by care and attention there is no question in the world but what you will frequently save lives. Remember these are not cases to bleed or treat in the old-fashioned antiphlogistic manner. They are cases in which you can do, I believe, nothing to shorten the course of the malady, but in which there is much to do to support your patient while the malady runs its course, and it is a great mistake to say that when you treat pneumonia in this way that you are doing nothing. It has been called an expectant treatment, and in the strict sense of that word it is not true that you are simply waiting for the disease to cure itself. It is true that you are waiting and watching for such emergencies as may demand the doctor's attention; and these emergencies are always in the direction, as I told you, of embarrasment from a feeble circulation.

There is but one thing to be remembered in regard to this procedure, and that is that you must not fatigue your patient. It is certainly a measure of very great value. The successful application of dry cups such as you have seen performed here is a source of great relief to these patients; and then with your alcohol and digitalis, and if necessary, if there be much restlessness, pain and discomfort, opium, will constitute the armament with which in very many of these cases you are pretty sure to be successful. There is one point in the history of this man worth mentioning. The pain of which he complained was in the region of the umbilicus. Many a

case of pleurisy has been mistaken for a case of colic because of this well known pleuritic pain. It is not at all unusual where the pleurisy involves the lower portion of the chest, and especially the diaphragmatic pleura, for the patient to refer his pain to the abdominal region even lower than the umbilicus. The suspicion of colic and peritonitis has been greatly entertained very often where the disease was a pleurisy or the beginning of a pneumonia. This is an error worth while to bear in mind. There is one other error made in the diagnosis of pneumonia not in adults nor very often in adolescents, but in children not infrequently. That is the mistake of a pneumonia for an inflammation of the brain; this is a mistake that is not very infrequently made. Children from three to ten years frequently have a pneumonia ushered in with convulsions and delirium. They may have a cerebro-spinal excitement. Remember this is something which you must look out for, children not complaining at all of any pain in the chest, but simply manifesting evidences of great cerebro-spinal excitement. He is complaining of the insomnia which is sometimes very distressing, namely, the insomnia of fever. Perhaps it is more than the insomnia of fever here. It is the insomnia which not infrequently accompanies any of the conditions which necessitate attention to breathing. When the act of breathing ceases to be purely automatic, it requires a great deal of attention, and in cardiac and pulmonary dyspnea, patients are often "dead with sleep" as they express it; and yet the instant they doze they will be aroused by this demand for breath, so that they are kept on the alert all the time to get their breath. Their attention is so absorbed by this necessary act that they can not lose consciousness for an instant. It will not do under these circumstances to give very large doses of opium with a view of diminishing the sensibility of the respiratory center; a wiser way is to stimulate the heart and to give at the same time moderate quantities of opium. Digitalis is a remedy of great value to overcome this sort of dyspnea, because it diminishes the irritability of this respiratory center, and by supplying it more thoroughly with blood and with digitalis and opium, you can get better effects than by the opium alone.

I would like to say a word to you in connection with this acute case on the subject of feeding in acute disease. In this particular case you have heard the house doctor say that the nausea has been troublesome, and for that reason that he has taken food in small quantities only. In many cases of pneumonia this embarrassment does not exist; and while I believe that in some instances patients with acute disease may suffer for the want of food, I believe that in many more instances they are fed very unnecessarily.

The tendency has been in the last 25 years to stimulate very largely, and I think that the food has been very much crowded; oftentimes I believe too that the stimulus has been crowded; but I believe that much injudicious feeding is by no means rare in the treatment of acute disease. You will know pretty well if you have had much experience yourself in sickness how the stomach will rebel against food. It is sometimes difficult for you to persuade yourself to take food. There is no disposition to take food in sickness. Now while I believe that it is not safe to yield to this objection to food which is natural to persons who are suffering from fever, I do believe that it is dangerous to push the food too far and to make your patient take food that he does not want.

It has been demonstrated pretty clearly that a man in health can starve himself for a good while without running any serious risk, and I do not believe myself that a little starving in the treatment of acute disease is accompanied with any danger. I believe it is much less harmful than the crowding of nutriment upon a stomach that rebels against it. I believe it is necessary to give food, but I think that it should be given in small quantities, not at too short intervals, and that it should be of the most nutritious quality.

I do not think that the taste of the patient should be consulted, or that his whims and habits should be consulted; but I think he should be fed in the great majority of cases with milk or some preparation of milk, animal broths and without solid food of any kind. There is a tendency to feed with farinaceous foods; to fill up the stomach with gruels with what is called the "sick pabulum," which is a source of infinite mischief; because it gives rise especially in febrile diseases to a fermentative dyspepsia which is the source of a great deal of suffering and oftentimes of serious complications. The gruels, I believe, and all the preparations of farinaceous food should be entirely abolished. Everything sweet is disgusting as a rule to the sick, and everything of that sort which is introduced by kind friends who desire to administer to the comfort of the patient should be abolished, and the strictest injunction should always be given as to the quantity and quality of food, just as much as in regard to medicines.

There should be no latitude about it; the

patient should take what he is ordered and not what his kind friends or attendants desire to give him. I think there is no more important function on the part of the doctor who is treating acutely sick people than to insist with the most absolute strictness upon the kind, quality and amount of food which is administered to his patients.

You will often find that a good deal of mischief is done in your absence by your failure to impress upon the minds of sick people your wishes in regard to the feeding of your patient. And in those where the methods and discipline of hospital practice are carried into the private sick room, it is most important for you to remember this injunction. Patients are no longer treated as they used to be in private practice. Formerly the feeding of the patients was left pretty much to the nurses and attendants, and the doctor did not give much attention to it. His business was to supply medicines, but the administration of food and stimulants have an equal importance with the administration of medicines and oftentimes a far greater importance. The food should be of the most digestible kind and should not be crowded.

SOCIETY PROCEEDINGS.

CHICAGO MEDICAL SOCIETY.

OFFICIALLY REPORTED FOR THE REVIEW.

Stated Meeting, July 20, 1885, S. J. Jones, Chairman, pro tem.

Dr. W. E. Casselberry read an interesting paper detailing the surgical procedures in a case of membranous occlusion of the posterior nares. His patient was aged about fifty, a native of Russian Poland, and had suffered from obstruction of the left nasal chamber for the last thirteen years. Thick, viscid and foul muco-purulent crusts accumulated in the nares and nasopharyngeal space which he could neither expectorate nor expel through the nose on account of the impenetrability of the nostril to currents of air. Partial occlusion, also, of the right nasal chamber necessitated frequent and prolonged mouth-breathing, and consequently he has suffered from atrophic pharyngitis and laryngitis, with painful deglutition, cough, suffocative paroxysms, etc. Deafness in the left ear and annoying tinnitus aurium have long been prominent symptoms. Most violent paroxysmal headaches, constant soreness on the top of the head, vertigo, especially upon stooping, and various indescribable cephalic sensations of a most distressing character, have served to render life miserable.

By a rhinoscopic examination the pharynx was seen to be covered with a foul, viscid, muco-purulent substance, continuous in descent from the naso-pharyngeal space, and imparting to the expired air a disgustingly fetid odor. The naso-pharynx was filled with rotten crusts which necessitated removal for further inspection of the parts. Having thoroughly cleansed the parts and accustomed the patient to instrumental manipulation, by using Voltolini's uvula holder, a good rhinoscopic image was obtained. All previous efforts to pass a probe from in front had failed, and passing the finger behind the palate through the mouth, an obstruction was encountered. The rhinoscopic image revealed a tense membrane covering the left choana almost completely. Its free edge was thin and sharp and approached so near the septum, that only a small slit or opening remained between it and the septum narium. The left ostium tube could not be seen, the membrane evidently lying behind the Eustachian orifice, and so intercepting its image. On passing a probe between the membrane and septum the edge of the membrane could be pushed backward. It felt tense and was from one to two millimetres in thickness.

The right choana was partially covered by a membrane extending half across the aperture and intercepting the view of the superior and outer half of the middle turbinated bodies, and the right ostium tubæ. This membrane was much thicker and less tense than on the left side.

In order to prepare the patient for treatment, he was trained daily for one week in the introduction of mirrors and instruments. A flexible silver probe was bent, after many trials, to exactly the proper curve to pass readily by way of the mouth and naso-pharynx into the opening on the left side and to pick up the membrane. A straight knife-electrode was then made to conform to the same curve, and lastly, this instrument, with the attachments complete, made several trial trips to the desired locality. All being in readiness, December 13, 1884, the knife-electrode was introduced through the opening between the membrane and septum and its edge pressed backwards against the membrane. At this moment the patient retracted the soft palate and shut off all vision. But, thanks to previous training, when instructed to relax all the parts the velum fell and the rhinoscopic image was perfect. Having adjusted the electrode properly the current was turned

on, the knife end became red hot in an instant and the membrane was incised without bleeding and without sufficient pain to cause the patient to wince. In another instant the current was broken, the electrode cooled in a few seconds and was withdrawn. An examination revealed that the work had been wonderfully efficient. The membrane having been tense, when it was incised, each part retracted leaving an opening sufficiently large to bring into view the middle and inferior turbinated bodies, and to the delight of the patient to allow a free passage of air through the left nostril, and from that moment he has had none of the distressing cephalic symptoms mentioned. The floor of the nose, the septum and the turbinated bodies were thickly incrusted with horribly fetid, cheesy masses, decomposed and dessicated secretions accumulated for years, which were removed with great difficulty. The catarrhal symptoms then gradually became less distressing. After two similar operations the left ostium tubæ became visible in the rhinoscopic mirror, and two or three touches with the knife served to entirely obliterate the membrane. Four similar operations served to obliterate the membrane in the right side, and now both posterior nares are widely patent and in approximately natural condition.

It is probable that atresia of the posterior nares is by no means so rare as the few reported cases and the omission of all mention in many treatises might lead us to suppose. The reporter has seen reports of two cases only occuring in the adult, one by Voltolini and another by Pomeroy. Records of cases occuring in infancy are more common, doubtless because the nursing function necessitates either a correct diagnosis and operation for relief, or death ensues and an opportunity for a postmortem examination. Reports of such cases are recorded by Donaldson, Luschka, Betts, Bohen and Emmerts. In all these cases the malformation was congenital and it was probably so in the case above reported. This patient has never suffered from any illness which would act as a cause for the development of such a membrane. It may be possible that in earlier years the membrane was relaxed and less complete, similar to the condition found on the right side, and later it underwent contraction, became thinner, more tense and sufficiently extended to cover the choana. The left membrane was composed chiefly of a reduplicature of mucous membrane, with possibly some connective tissue and muscular fibres interlying in the thicker portion toward the outer border. The right structure contained considerable muscular tissue. There was no osseous malformation. Upon the left, the attachments were, apparently, to the mucous lining of the superior posterior edge of the vomer, the inferior surface of the body of the sphenoid bone, the left pharyngeal wall behind the Eustachian orifice and the superior posterior surface of the velum palati. Upon the right the attachments included only the inferior surface of the body of the sphenoid, and the right pharyngeal wall behind the Eustachian orifice.

The galvano-cautery is more useful in such operations because it is a dull imstrument; can be introduced or withdrawn without harm; can be used when applied to the proper place, and almost no bleeding or pain ensues.

The society adjourned immediately after the paper was read and Dr. Casselberry had exhibited a Fleming galvano-cautery battery with electrodes—as modified by Carl Seiler.

STATE BOARD OF HEALTH OF MISSOURI.

Circular No. 2.

Office Board of Health of Missouri,
St. Louis, July 25, 1885.

To the Public, and Local Boards of Health: In view of the often unknown or suspicious sources from which is drawn the water supply used by manufacturers of various kinds of mineral or other artificial waters sold in this state, and of the reasonable probability that soda water as dispensed through fountains, and mineral and carbonated waters generally, may constitute an insidious medium for the causation of disease in unsuspecting consumers of such waters, the state board of health desires to hereby caution the public as to possible danger to health in this direction, and to urge upon retail dealers and dispensers of such waters that they will demand of all such manufacturers, whose goods they handle, certificates obtained from their local health authorities, and for public exhibition, officially declaring the sources from which all waters used in the manufacture or preparation of their goods are derived, together with an opinion as to the degree of wholesomeness and sanitary safety attaching to the same.

It is recommended that all local boards of health throughout the state make inquiry into this matter, and where manufacturers of the aforesaid waters fail or refuse or are unable to procure the said certificate, or when-

ever, in the opinion of the board, the water used is of unfit quality, or when its ascertained source is found liable to contamination, that they will in the interest and for the protection of the public, make widely known such failure or refusal or detrimental condition of manufacture, to the end that such action by them may justly operate to lay goods produced amidst questionable sanitary surroundings, under serious suspicion and discredit, in a public health sense, and render their sale difficult for the purposes intended.

By the executive committee,

GEO. HOMAN, M. D., Secretary.

SANITARY CONVENTION AT YPSILANTI, MICHIGAN.

REPORTED FOR THE REVIEW.

Great interest was manifested in the Ypsilanti Sanitary Convention which was held June 30, and July 1, 1885, under the auspices of the Michigan State Board of Health. The physicians of Ypsilanti, the professors of the State Normal School, and a large number of other prominent citizens of that place were in constant attendance. About twenty physicians and health officers from other places were also in attendance.

C. L. Yost, Mayor of the City, opened the convention with a brief address of welcome, in which he said that "in times past we have been honored with the presence of other assemblages for consultation upon religious, political, medical or other interests; but this is the first time that disinterested philanthropists have come to us to discuss those great practical questions relating to the guardianship of public health." He thought that the adage, "an ounce of prevention is worth a pound of cure," was the inspiring motive that brought them together. Their city was more than usually blessed with conditions for good health; still they recognized the value of detailed instruction in sanitary subjects. Sanitary science is in its infancy and all attempts to further it and bring intelligent attention to its teachings should be welcomed by thinking men everywhere.

Edwin Willits, President of the Michigan State Agricultural College, presided over the convention, and in his address dwelt upon the value of human life considered from an economic standpoint as worked out by eminent statisticians. A number of people who should produce $3,000,000 when in good health, could produce when not in good health only $2,000,000. Here is a loss of one-third, much of which could be saved by applying the simplest sanitary precautions. It is the duty of a community to keep these human earning machines in good conditions of health or earning capacity, even from economical motives. A community has the legal right to do this. We want pure water and plenty of it, clean streets, cleansed sewers and drains, swamps drained, cesspools filled up; and we should not count the cost on our fingers. The crowning labor of our medical science is the warding off of disease. Given by heredity a sound constitution, pure air, pure water, and nutritious food ought to guarantee to every human being, as he puts his foot on this earth, his three score years and ten, with which assurance he might plan the labors of a well-rounded life.

Rev. Dr. Woodruff, of Ypsilanti, read a paper on "The Moral Effect of Sanitation." He told of the importance the ancient Jewish people gave to sanitation; and in a forcible way pointed out its power in elevating man morally as well as socially and physically. He thought the present attention given to sanitary matters is not temporary. The reform has come to stay.

Prof. Austin George, of the State Normal School, spoke on "Sanitary Needs of School Buildings and Grounds." 1. School site should be on gravely soil, a natural knoll, admitting thorough drainage. 2. Wells should not be nearer than 100 feet to the outhouses. 3. Basements should be high, with free circulation of air under ground floors. School rooms should contain 250 cubic feet of air space for each child. The light should come in over the left shoulder. The windows should go to the ceiling, and within three and one-half feet of the floor. The blackboard should be on the side of the room opposite the windows, and never have a glossy surface. 4. The simplest heating and ventilating apparatus is the hot-air furnace, and for small buildings the jacketed stove. The foul air outlets should be ample, and at the floor level. With any system, the rooms should be frequently flushed with fresh air through windows and doors. The temperature should be kept at 70° Fahr., not by teachers' sensations, but by thermometer. 5. Perfect desks and benches are not yet made; they should be adjustable, to suit different sizes, and be constructed with reference to the curves of the body. There should be foot-rests which could be raised or lowered until each pupil is made comfortable and able to take a healthful position. Many spinal complaints and pulmonary diseases are produced by im-

proper desks. 6. Means for drying wet wraps should be provided. 7. Precautions against fire should be had, especially in the heating apparatus and the chimney. 8. "Inasmuch as the state educates the children, and compels their attendance in public buildings, the state should see that the children are not subjected to any preventable cause of disease."

This paper called out a long discussion, participated in by Dr. Avery, of Greenville, President of the State Board of Health; Professor Vaughan, of Ann Arbor, member of the State board of Health; Professor McLouth of the State Agricultural College, Professor Langley of the Michigan University, and many others.

Dr. Bion Whelan, of Hillsdale, Mich., spoke on "Sanitation in Small Cities." The water supply should be guarded from contamination from cesspools and vaults. If we could not have sewers, the most feasible plan for disposing of garbage is to divide the city into districts and have it removed by licensed scavengers. Sanitary science should be taught in schools. The women should be taught sanitary needs, as much of sanitary work falls upon them. The nature of contagious diseases, and means for their restriction, should be known by all.

Dr. J. K. Kellogg, of Battle Creek, member of the State Board of Health, treated of the "Disposal of Slops and Garbage," illustrating by use of the blackboard. He pictured in a graphic way the ordinary condition of back yards, as contrasted with front yards. He prefaced his subject proper with a brief description of bacteria and other low forms of microscopic life, and showed the relation of these to decay, no decay being possible without their intervention. He showed the importance and usefulness of certain sorts; the dangerous nature of others. He spoke of flies in relation to filth. They are a very strong indication of the presence of filth, and consequently of germs, and it is even believed that the germs of certain diseases may be spread by them. Whenever a house is full of flies you may be certain that slops or garbage of some sort has been allowed to accumulate about the premises. He stated that the air about cesspools, foul drains, and other filthy places is usually swarming with micro-organisms, and he believed that even if such germs were not the direct cause of certain diseases, the continual breathing of such air predisposes thereto. All sources of filth should be carefully and speedily removed from the habitation and its vicinity. Garbage can be reduced to a minimum by a little attention to domestic economy. Much food that becomes garbage through carelessness could be turned to good use if not neglected. Even after due care, however, some refuse will remain. So far as possible this should be burned. That is the best method of disposal. Where it is impracticable a water-tight, covered receptacle can be used for receiving such refuse, which should be removed frequently by a paid scavenger, or otherwise. Slops should not be thrown upon the ground, into open drains, or into cesspools in the yard. He had known of frequent instances in which wells and cisterns were contaminated from the seepage of foul privies, drains and cesspools. If slops must be poured on the ground, set off a portion of the back end of the garden, and distribute the slops on different parts of it on alternate days, giving in this way some opportunity for the soil to oxydize the organic matter. Slops containing excreta from contagious diseases should be thoroughly disinfected.

Chas R. Whitman, of Ypsilanti, one of the regents of the Michigan University, read a paper on the "Limitations and Duties of Local Boards of Health." The powers and duties of local boards of health should be as follows:

1. To ascertain the causes of sickness and of death, and from time to time the prevailing diseases among all classes.
2. To prevent or mitigate diseases, especially zymotic or epidemic, endemic and contagious diseases.
3. To effect the periodical or special vaccination of the inhabitants.
4. To ascertain, prevent, and remove or abate nuisances dangerous to public health.
5. To prevent the introduction of malignant, infectious, or contagious diseases, and to isolate persons afflicted or believed to be afflicted with such diseases.
6. To establish, locate, and manage hospitals for persons having contagious diseases.
7. To prevent the sale of any article for food or drink which is unwholesome.
8. To enforce these regulations by a sufficient penalty:

Mr. Whitman said that the radical defect in the law defining the powers and duties of local boards of health is the lack of a general law forbidding evils and imposing penalties. Such a law should be enacted, and it should be as sweeping and readily enforced as the criminal law. He thought that the subject of sanitation should become one of education in the schools, so that the future citizen, architect and physician may be established in principles of sanitation.

After a thorough discussion of this paper, participated in by Prof. A. B. Palmer, of the University of Michigan, and many others, it was voted that Mr. Whitman be requested to draw a bill suitable for presentation to the legislature, framed to cover the question under discussion, and suited to correct existing defects in the present law. The bill is to be published in the proceedings of this convention.

Dr. A. F. Kinne, in a paper on "Sources of Malaria in Ypsilanti." took the ground that malaria is caused by a malarial germ, native in certain soils and waters. Boards of health should require that the basements and sub-floor spaces be thoroughly ventilated; and no mill-dam owner, who used water, should be allowed to keep the pond much less than full.

Dr. O. W. Wight, Health Officer of Detroit, spoke on the "Prevention of Communicable Diseases." He showed clearly the contagious nature of those diseases; the great and unnecessary loss of human life resulting therefrom; and how they were best restricted, citing cases from his own long experience in Milwaukee and Detroit. The main points in an outbreak of contagious disease are:

1. On the part of the householder and physician.

(*a*). Speedy determination of the nature of the disease;

(*b*). Prompt notification to health officers;

(*c*). Cheerful acquiescence in regulations of health officer.

2. On the part of the health department.

(*a*). Immediate separation of the sick from the well, and only those required to nurse should be allowed in the room; the sick room should be an upper chamber;

(*b*). Strict quarantine of the premises, and placarding of premises; if small-pox, all should be vaccinated in both arms;

(*c*). Private funeral;

(*d*). Thorough disinfection, after death or recovery, by chlorine gas or fumes of burning sulphur, of bedding, clothing, premises, etc.

Dr. Wight thought that diphtheria and scarlet fever were sometimes spread by careless physicians—criminal carelessness. During four years in Detroit, he had witnessed a large growth of public sentiment in favor of health work.

Dr. Victor C. Vaughan, of Ann Arbor, member of the State Board of Health, next spoke on " Water Supply." Sources of water supply are three—cisterns, surface, and subterranean. Cisterns should always be plastered outside and inside, with an excavation of at least two feet larger than the reservoir, so that a brick or stone wall may be built or plastered as above. Cistern water when boiled and filtered is the best for use. Dr. Vaughan cited cases in Ann Arbor and Adrian in which drain water percolated into cistern water, causing malignant typhoid fever. In the discussion of surface water, he said that we had in this country all the conditions for the development and spread of the cholera germ, should it once reach our shores. Well water is a suspicious water, because of the ease with which contamination can be carried down through the sand and gravel into the well. Subterranean water is not necessarily pure. By carefully selected illustrations, he showed that contamination would be carried through the soil an almost limitless distance by the percolation of water, the water acting as the carrying agent.

Prof. Jas. H. Shepherd,of Ypsilanti, read a paper on "The Present Condition of the Water supply of Ypsilanti." The city has been settled from sixty to seventy years; it has no sewers, and the privy system is in use. The drinking water is obtained mostly from shallow wells. Ten careful analyses of well water had been made, and in eight of them chlorine and albuminoid ammonia were found largely in excess of what pure water should contain. The water of a drive well and that of the Huron river, which runs through the city, were comparatively pure.

A paper by Prof. C. F. R. Bellows, of Ypsilanti, on "The Future Water Supply of Ypsilanti," was next read. It is an able paper, but is of rather local interest, although the principle recommended may be quite generally adopted.

The proposal is to have a general water supply from one very large well outside the city proper, in such a locality that the watershed, supplying the well, shall not be liable to contamination by privies, etc.

The papers on water-supply called out a spirited discussion, led by Dr. Wight, of Detroit, and Prof. Palmer, of the University.

Dr. Ruth A. French, of Ypsilanti, read a paper on "Management of Earth Closets." It is a practical way out of the "privy nuisance" for towns too small to have sewers and a general water-supply. Earth closets deodorize the excreta, destroy germs of contagious diseases, and are necessary to invalids.

Erwin F. Smith, of Lansing, spoke on the "Relation of Sewerage and Water-supply to to the Death-rate in Cities." His general propositions were:

1. Some method of sewage disposal is a necessity of civilized life;

2. Dry earth closets, properly cared for, will answer for isolated dwellings and small villages, but water carriage is the only system adapted to large towns and cities;

3. The prevalence of typhoid and cholera is in an inverse ratio to the sewerage of a city;

4. The modern increase of diphtheria cannot be attributed to sewers;

5. The death-rate from all causes falls whenever a city is thoroughly sewered, and never attains its ante-sewered maximums;

6. Judged solely from the standpoint of pecuniary economy—the lowest of all standards—sewerage and water-supply can be successfully defended against all opposition.

The statistics used in this paper are drawn from the highest authorities, American and Foreign; are brought down to the close of the year, 1884, and in many cases cover long periods—ten to forty years. They show that typhoid fever has fallen off from one- half to nine-tenths, in several cities, since they adopted sewerage, and that such cities are practically secure from the ravages of cholera. Per contra, in non-sewered cities, the typhoid fever and the cholera mortality is as great today as it was thirty years ago.

Dr. H. F. Lester, of Detroit, advocated the separate system of sewerage as best, and said it could be built in small cities for about $6,000 per mile. He spoke of the evil influence of soil infection by vaults and privies, and urged sewerage as a sanitary necessity.

At the close of the convention arrangements were made for the organization of a local sanitary association, the local committee of the convention being a committee to complete this organization.

ITEMS.

—The International Sanitary Conference and the Disinfection of Rags.—One of the incidents in a controversy that has been going on for some months between certain sanitary officials and the importers of rags was the suggestion that a report of the proceedings of the recent International Sanitary Conference held in Rome, which appeared in a Philadelphia medical journal, contained an interpolation by the correspondent of the journal in question, in the following clause: "Disinfection of merchandise and of the mails is unnecessary (steam under pressure is the only reliable agent for the disinfection of rags—les chiffons en gros.)" This suggestion having been urged in the "New York Times," the American delegate to the Conference, Dr. Geo. M. Sternberg, of the army, wrote to that paper denying the truth of the charge and affirming the accuracy of the account given in the Philadelphia journal. The "Times" now returns to the matter and publishes the following remarkable statement: "A gentleman of this city, who is interested in the importation of paper stock, wrote to Koch, at Berlin, for definite information on this point, and yesterday he received a cablegram stating that no such words as those quoted in parentheses appear in the report of the Committee."—N. Y. Med. Jour.

—The Race of Life.—A sporting paper, viewing the race of life from its distinctive standpoint, gives the following "pointers" to those who might wish to stake money on the issue of this great go-as-you-please contest against time:

"If one could see a million babies start on a journey (all scratch the mark, of course), and could follow them through life, this is about what he would see: Nearly 150,000 of them drop out of the ranks by the end of the first year, while twelve months later the numbers would be further thinned by the deduction of 53,000 more; 28,000 would follow at the end of the thirteenth year. They would throw up the sponge by twos and threes until the end of the forty-fifth year, when it would be found that in the intervening period something like 500,000 had left the track. Sixty years would see 370,000 grey-headed men still cheerfully pegging away. At the end of eighty years the competitors in this great "go-as-you-please" would number 97,000, but they would be getting more shaky and 'dotty' each lap. At end of 95 seasons 223 would only be left in the final 'ties,' while the winner would be led into his retiring-room, a solitary wreck, at the age of hundred and eight. There is something grimly humorous in the quaint array of figures, but they are founded upon statistics carefully compiled. One cannot help wondering what would be the betting at the start about any one of those million babies coming in alone at the one hundredth lap of the great and mysterious track upon which the race of life is run."—Medical Age.

—Death of Dr. John Staige Davis.—Dr. John Staige Davis, Professor of Anatomy and Materia Medica at the University of Virginia, died on July 18, of paralysis, at Charlottesville. He was born October 1, 1824, in Albemarle County, Va., and was educated at the University of Virginia, from which he was graduated and received his diploma of M. D. in 1841.

This will be sad news for the many invalids he so kindly cared for during the summer seasons at Rock Bridge Alum Springs, Va.

—Professor Tyndall's Gift to American Colleges.—The "British Medical Journal" states that the proceeds of Professor Tyndall's lectures in the United States in 1872, which, with the accumulated interest, now amounts to $32,400, are to be divided equally between Columbia College, Harvard University, and the University of Pennsylvania.

—The officers of the American Otological Society for the ensuing year are: President, Dr. J. S. Prout; Vice-President, Dr. S. Sexton; Secretary and Treasurer, Dr. J. J. B. Vermyne; Publication Committee, Dr. Vermyne, Dr. Blake and Dr. J. O. Green; Committee on Membership, Dr. Dr. Carmalt, Dr. Kipp and Dr. Theobald.

—The Danger of being an Anti-Vivisectionist. —M. Magnan cites a number of cases of madness among anti-vivisectionists. One woman first renounced animal food, then took in all stray dogs, and finally went round to the butchers, begging them not to slaughter any more cattle. She became finally mad, and was received as a patient at Charenton.

—Chloroform and Tape-Worms.—Dr. N. O. D. Parks, of Ashton, R. I., after unsuccessfully using filix-mas, prescribed the following to a woman with tape-worm: He ordered her to fast for twenty-four hours, at the end of which she was to take one drachm of chloroform in an ounce of syrup in three doses, at intervals of two hours, to be followed in an hour by ol. ricini, two ounces. The prescription was completely successful.

—The following is from an epitaph on the grave-stone of Mrs. Arabella Greenwood, who died in childbed during the last century. It was written by her husband, and evidences alike the depth of his love, his great humility, and his disapproval of the treatment she received:

Such was her condescensione, and such her humilitie,
Shee chose to take me, a Doctor of Divinitie,
For which heroicke act she stands confeste
Above all others the Phenix of her sexe,
And like that birde one young shee did begette,
That shee might not leave her sex disconsolate.
My grief for her is so verie sore
I can onlie write two lines more:
For this, and everie good woman for her sake,
Never let a blisterre be putte on a lying-in
woman's backe.

—In the Chicago Medical College Dr. W. W. Jaggard has been elected Professor of Obstetrics.

—Men as Trained Nurses.—An association has been formed in London for the purpose of training men as nurses. The promoters believe that many men would rather be attended in illness by their own sex than by women. Bachelors and widowers, residing in chambers, and some men in families would, it is thought, employ properly trained men.

—Dr. N. Senn, of Milwaukee, Wis., has accepted the Chair of Principles and Practice of Surgery, and Prof. Christian Fenger that of Clinical Surgery in the College of Physicians and Surgeons of Chicago.

—Chicago is to have a charity that will be a credit to the philanthropy of its founder. March 7, the will of Mrs. Clarissa C. Peck was admitted to probate. By the provisions of this will the sum of $125,000 is appropriated to the purchase of ground and the erection and furnishing of a building to be known as a home for incurables, and the balance of an estate amounting to upward of $600,000 is given as an endowment for the same.

—Pasteur's method of vaccination for cattle-plague has proved completely successful in India for elephants, horses, asses, cows, buffaloes, and sheep.

—Oxide of zinc, according to Professor Peterson, of Kiel, is just as good as iodoform in the treatment of wounds, is not poisonous, is cheaper, and does not smell offensively.

—The Pacific Medical and Surgical Journal states that the law regulating medical practice is a failure, because juries cannot be found who will convict, "even though they be the lowest Chinese charlatans."

—Dr. Morris H. Henry, of New York, sailed July 4th for Europe, to represent the American Medical Association at the meeting of the British Medical Association, to be held at Cardiff, Wales, on July 28, 29, 30 and 31.

—The summer hotels are nearly all provided—so the advertisement tells us—with "distinguished resident" physicians. Many of the names are unknown to fame in the cities said to be their homes during the autumn, winter, and spring months of the year.

—The City Government of Boston has appropriated $40,000 for the erection of an additional building, to be used in connection with the city's hospital, for contagious diseases.

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ANTIPYRINE AS A REMEDIAL AGENT.

The demand for some therapeutic agent that would positively reduce excessive degrees of fever and at the same time not in any wise endanger the patient has been a desideratum, that appears, from all accounts we have seen and from a limited personal experience, to have been obtained in the drug, antipyrine.

Dr. Paul Guttmann, of Berlin, so favorably known as the author of a volume of Physical Diagnosis, and who has, as medical director of the municipal hospital Moabit, opportunities for clinical and therapeutic studies nowhere excelled, has made the consideration of antipyretic drugs the theme of a paper read before the Gesellschaft f. Heilkunde. We omit his remarks on quinine, valuable though they are, because this agent is extensively and well known.

In 1876 salicylic acid was introduced, first as a remedy in acute articular rheumatism, then as an antifebrile in general. But in the large doses demanded for strong antipyrexia the acid as well as its sodium salt is not well borne by the stomach, seriously affects the ear and is contraindicated in feeble heart-action. Besides the action is not unfailing and above all, not rapid enough.

Carbolic acid, kresotinic acid, hydrochinon and resorcin have all been tried but soon departed from, because of their unreliability and disagreeable toxic influences.

The same is true of chinolin, a substance derived from quinine. It is uncertain and feeble in its effects and causes distressing nausea and vomiting.

Taking chinolin as a base, the endeavor has been for several years to produce a substance by synthesis, that would answer the demand for a reliable agent. Such a substance is kairin (chemical name: oxychinolin-methylhydruer) that was synthetically obtained by Fischer, of Munich, and whose therapeutic effects were studied by Filehne. This drug was first tried as to its toxicological and pharmacological action upon animals, then upon man in health, then upon fevering individuals in small doses first, which were gradually increased to a point of dosage when a definite reaction ensued. Kairin is powerful and certain, and neither quinine nor salicylic acid can rank with it. Kairin, according to Guttmann, is given in doses of ½ to 1 grm. two or three times in succession at hourly intervals. The highest fever could be so reduced to the normal in three to four hours. Profuse sweating ensued. The degree of anti-febrile action could be determined beforehand by regulation of the size of the dose and the frequency of repetition.

But kairin has two serious faults: In the first place its action is too transient. The temperature rises again as soon as the reduction to the normal is attained. And so rapidly, too, as after a cold bath. Two or three hours after the reduction the previous degree of heat is again attained. A second, more serious fault is, that the rise is accompanied by rigors, more or less severe; and together with these untoward symptoms there was cyanosis of the face and threatening collapse. For these reasons no great practical application of the remedy was had.

The latest of these synthetic chemicals having chinolin as a base is thallin (tetrahydroparachinasol). V. Jacksch, in Vienna, introduced it and found that doses of ¼ to ½ grm. invariably are followed by a strong reduction of temperature with profuse swea

ing. There is a tartrate, a sulphate and a muriate of this agent and all possess this positive and specific action.

Thallin, which derives its name from the green reaction of its solutions with chloride of iron, etc., is even more powerful than kairin. But, like that of kairin, its effect passes rapidly away and the temperature rises with rigors. Cyanosis and collapse have not been noted by v. Jacksch or Guttmann.

Kairin and thallin were found by Prof. Skraup, of Vienna. Previous to the finding of thallin, Knorr, of Erlangen, had prepared a substance containing chinolin, which he called antipyrine after Filehne had tested the effects.

Chemically speaking it is dimethyloxychinicin. About one year has passed since Filehne's first publication as to its effects, and the remedy has become a recognized one, not alone in Germany,but throughout Europe,and its use is gradually becoming established with us.

Antipyrine is an antifebrile remedy par excellence. It meets all requirements for practical use and in all instances acts as a prompt and forcible antipyretic. The degree of reduction of heat is directly in relation to the dosage, and, above all things, the reduction is of considerable duration, and no alarming symptoms attend or follow its administration.

Guttmann gave the remedy in 297 cases of varied character, in males and females, old and young.

He treated with antipyrine:

	Cases.
Typhoid or enteric fever	58
Phthisis	53
Pneumonia	45
Rheumatism, acute articular	17
Measles,	16
Diphtheria	11
Pleuritis	10
Erysipelas	10
Scarlatina	9
Phlegmonous inflammation	9
Variola	5
Intermittent fever	5
Bronchitis	4
Parametritis	4
Tonsilitis	4
Burns	3
Empyema	2
Retained placenta, fever from	2
Febris recurrens	2
Acute miliary tuberculosis	2
Pericarditis	2
Acute peritonitis	2
Suppurative arthritis	2
Acute infectious osteomyelitis	2
Puerperal fever	2
Pyemia	1
Acute cystitis	1
Acute meningitis	1
Acute nephritis	1
Otitis media purulenta	1
Pelvic abscess	1

Guttmann has observed that if two doses of two grm. each be given an hour apart, that the temperature will sink 1.5° to 2° C., or more in a few hours. The reduction is variable in acute diseases, inasmuch, as is well known, they offer different degrees of resistance to methods of reducing the temperature individually and again in the several stages of their development. Thus, if the fever be continuous it is less impressed by antifebrile measures than if the type is or has become markedly remittent. Pneumonia and febris recurrens have been found to be particularly unyielding. Large doses, four to six grm., however, will depress these fevers. In the latter stages of enteric fever and in chronic fevers, such as that of phthisis, where we meet with remissions, smaller doses answer. Guttmann advises that two grm. be given an adult as an initial dose; this is to be repeated after one hour, unless the fever has gone down considerably; then one grm. suffices as a second dose.

Perspiration, more or less profuse, attends the decline of the fever; this is in no wise a discomfort to the patients.

In regard to the duration of the antipyretic effect Guttmann says that if antipyrine be given in suitable amounts at noon and in the early afternoon hours, that the low temperature is maintained the better part of the night, and that on the following forenoon an approximate degree to that of the previous day is usually attained. Antipyrine may then again be given, and thus a low degree be established the greater part of the period of hyperpyrexia in acute disease.

No chill attends the rise of fever. Guttmann states that to appreciate this, one must

have seen the restless and distressing condition of patients to whom kairin has been given.

Occasionally an eruption, resembling measles is developed, which passes away rapidly.

Children are said to bear the drug well in half grm. doses. An aqueous solution may be administered hypodermically. Such, however, is hardly called for under ordinary circumstances. The remedy is readily soluble in water or wine and is easily taken.

The urine is not altered by antipyrine.

Intermittent fever is not at all impressed by antipyrine or kairin. The paroxysm can not be averted; only the degree of fever is favorably modified.

Acute articular rheumatism is modified both as concerns the fever and the pain.

Guttmann sums up by designating antipyrine the most reliable, and in large doses the most powerful antifebrile agent, and one designed in acute inflammatory conditions to supersede quinine.

From the above its applicability in thermic fever appears to us well grounded. The reduction of fever is of such permanency, as can not be arrived at by cold baths and effusions alone.

Really? Yes! Thanks!

Our much esteemed colleague of the Independent Practitioner pays the following handsome compliment to an eastern and western journal, and couches it in Chesterfieldian grace:

"It is only an editor who can appreciate the immense amount of labor involved in licking into shape the crude and carelessly written communications that make up the larger part of the contents of a journal. There is many an educated, cultured man, who cannot command language that shall read smoothly. There are a thousand inelegancies of speech, colloquialisms, redundancies of expression and transpositions, to say nothing of gross grammatical errors and rhetorical inaccuracies, that the editor must correct, even in the manuscript of the best of writers. So much, too, depends upon the punctuation, the paragraphing, and the judicious use of capitals and different fonts of type, that a well-edited journal becomes, to the initiated, a real work of art. A good editor is an expert in the use of language, and his journal gives evidence of the fact in every page. The casual reader, whose attention is directed to the euphonious language of an article and the elegance of its diction, perhaps little imagines that it is to the "editing" that his admiration is due. Especially in the reports of society meetings is this the case. What would speekers say if editors printed their speeches precisely as they are delivered, or even as they reach the editorial table in the report? It is to this careful and able editing that journals like the Maryland Medical Journal and the Weekly Medical Review owe much of their charm. The latter, in spite of the rather frequent change of editors, has always retained its literary merit. One of these journals is eastern, having its home in Baltimore; the other, western, hailing from St. Louis. They differ in characteristics, but are both alike in presenting points of excellence that amply account for their extended circulation."

Treatment of Fever as a Symptom.—The London Lancet of June 6 (Analectic) writes: "While the chief object of all medical treatment is necessarily to eradicate disease by attacking its very beginnings, there are times in which the relief of a pressing symptom may constitute the first important step towards recovery. Fever is such a symptom. How often does one find that, even in the presence of an active morbid cause, the mere remission of temperature for a certain period assists the physician, by obtaining rest for his patient, by gaining time, by quieting irritability in the neighborhood of a source of mischief, and so converting an acute into a subacute or chronic process. These effects appear in many diseases which are said to run an unvarying course—in typhoid fever and early tuberculosis, for example; and there are good physiological reasons why the abatement of fever in itself should

materially aid and tide over other efforts of nature or of art which are designed to cut the root of unhealthy action. It becomes, therefore, a matter of interest to inquire in what way a fall of temperature can thus react upon the local processes which determine the course of fever, and that fever does depend on local causes may probably be accepted as an axiom. All its features tend to show that it is a nervous disorder which acts along the lines of the vaso-motor system, that its method is reflex, and its result a destructive metabolism, which reveals itself in general emaciation, and is most intense at the original seats of morbid irritation. The aim of antipyretic measures must, therefore, be to allay this nervous overwork by opposing a buffer to the repeated shocks of peripheral stimuli, and this may clearly be accomplished in more ways than one. Thus it is frequently possible, by using narcotics, to lull the excited cerebro-spinal centres generally, and so to weaken their response to provocation. By another agency the constricting influence of the vaso-motor centre may be specially and directly inhibited and the circulatory system proportionately eased, as would seem to be the case when salicylates are employed. In this case, also, the harassed nervous centres share the general rest. The heat-regulating mechanism, too, if it exist as a separate factor, may be restrained by similar means, when its disordered forces would otherwise result in riotous excess of tissue change. In any case, the reduction of fever, besides preventing general loss of power and substance by wasteful molecular action, is directly beneficial in another way. By depleting areas which border on the casual irritant or its habitat, and the intense congestion of which magnifies the force of stimulation, it must react as a sedative at the very source of disease. These observations suffice to show why antipyretics possess a real value even in such diseases as continuous fevers. Apart from the aid they render to the further resources of medical skill, and apart from their action on septic germs, they often appear, by the rest which they procure alone, to constitute the chief element in the cure of febrile disease."

Paraldehyd as a Hypnotic.—G. F. Hodgson, M. R. C. S., according to a paper read before the East Sussex District of the South-eastern Branch, and published in the British Medical Journal July 18, appears to have had a most extensive experience with this drug. He defines its chemistry which will interest a subscriber who recently inquired into its composition. Dr. Hodgson says:

"Paraldehyd has been known to the chemists for a considerable time; but, as in chemical constitution it is only a modification of aldehyd, and, as the latter was known, whether swallowed or inhaled, to produce convulsions and coma, and altogether to be too violent in its action to be sagely available in therapeutics, it was too hastily assumed that paraldehyd would be the same.

Less than three years ago, it occurred to Dr. Cervello, of Palermo in Sicily, to test its powers; and, having administered some to rabbits and dogs, and thereby producing in them peaceful sleep, on arousing from which they immediately seemed as before, and at once began to feed, he then ventured to try it on himself. In the course of an hour, he took one drachm, which produced a strongish drowsiness, without any other unpleasant effect. This encouraged him to give it to other people, healthy and sick, with the result of soon proving it to be a valuable hypnotic, devoid of all danger, unless given in such a large quantity as nobody would think of using.

Soon after this, the remedy was employed in Italy and Germany, and of late in this country. In the Medical Chronicle (February 1885), Dr. Leech, of Manchester, has contributed a carefully written article upon it; and a medical officer to one of the asylums at Northamptom has recenty eulogised it in the Lancet.

I believe that, taken altogether, my own prescriptions of it have now amounted to nearly or quite two quarts. I can quite join with others who have used it in believing it

to be a very valuable medicine. The sleep produced by it is calm, closely resembling that of health, with no unpleasant premonitory or after-effect and its action is prompt. It seems appropriate in most diseases where a hypnotic is necessary; mania, hypochondriasis, delirum tremens, migraine, and the multifarious minor diseases in which insomnia prevails, being all benefited by it. A great advantage is its non-depressing influence on the heart, in which respect its use is often much to be prefered to that of chloral-hydrate.

Again, in gout, it is very preferable to chloral-hydrate. Liebreich held that the latter, after absorption, undergoes decomposition, setting free, in the blood, chloroform and formic acid, which last might aggravate the effects of the pre-existing uric acid dyscrasia. Others deny this chemical decomposition of chloral-hydrate in the system, and, whether it occurs or not, I do not pretend to know; but clinical observation leads me firmly to believe that the insomnia of gout, whether acute or chronic, is much more advantageously treated by paraldehyd than by chloral-hydrate, the latter medicine having seemed to prolong the acute attacks, and to have promoted their recurrence when given for the insomnia associated with a gouty constitution; whereas paraldehyd has seemed to have the reverse influence, and to help maintain the excretion of urine well charged with its normal solid constituents.

I know of only two conditions in which the use of paraldehyd is objectionable, namely, in irritable or inflamed states of the throat or of the stomach, which its acridity is pretty sure to aggravate; and, indeed, this pungency is to be borne in mind when prescribing it for any case, and free dilution always provided for. The following formula I find the best.

℞ Pulv. tragac. comp. ℈j; syrup. aurant. ʒiv; paraldehydi ʒj; sp. chlorof. mxv; aquam ad ℥iij.

In mild cases, one such dose suffices for the night; in more severe cases, its repetition may be necessary in an hour or a few hours; and such repetition answers better than giving a larger dose at once.

By combination with morphia or with bromides, the soporific effect of both medicines seems enhanced.

As an anodyne, the power of paraldehyd is feeble. It acts principally upon the cerebrum, and partially on the medulla. It is antagonistic to strychnia, as proved by its preventing (when given beforehand) an otherwise fatal dose of strychnia from killing a rabbit or other small animal (Société de Therapeutique, quoted by the Medical Press).

The powerful smell of paraldehyd is disagreeable to some people, and especially so the persistency with which the breath is tainted with it, twenty-four hours often scarcely sufficing for its departure after a dose; but then, as Dr. Leech remarks, this fact is a great security against its being taken clandestinely, as chloral no doubt is. When the drug is administered per rectum, the breath is still tainted by it. How it might answer in the sleeplessness of inflammatory and febrile diseases, I do not know, but I should expect not so well as chloral-hydrate.

Paraldehyd (para, side by side with) is an isomeric modification of (acetic) aldehyd. At ordinary temperatures it is a colourless and inflammable fluid, whose specific gravity is 0.998, thererore just a trifle lighter than water, and with a powerful odor, somewhat resembling œnanthic or nitric ether. Mixed with a little water it appears oily, and with a larger quantity, on shaking, mixes well.

Aldehyd (alcohol dehydrogenatum) is an organic compound, intermediate between alcohol and acid. It is derived from alcohol by abstraction of two atoms of hydrogen, and is converted into acetic acid by the addition of one atom of oxygen.

There are numerous aldehyds (acetic, benzoic, œnanthylic, salicylic, valeric,etc.). Nearly all of them are liquids which volatilise, and they are prone to decomposition, merely exposure to the air converting them into acids. Some of them exist ready formed in plants, or are given off as volatile oils on distilling the plants with water; thus cinnamic aldehyd

constitutes an essential part of cinnamon oil, salicylic aldehyd of oil of spiræa, and so on. Aldehyd, acted on by chlorine, is converted into chloral.

These chemical details may be thought a little superfluous in a therapeutical subject, but, to my mind, it is interesting to understand paraldehyd's place in nature; and, moreover, as other aldehyds besides our acetic friend may have their paraldehyds, possibly some of these also may be found, some day, to posess valuable medicinal virtues."

Treatment of Stricture by Internal Urethrotomy.—In the surgical section of the Academy of Medicine in Ireland, the above subject was thoroughly and interestingly discussed in the meeting of May 21, (British Medical Journal.)

Mr. Thornley Stoker read a paper on the treatment of stricture by internal urethrotomy. He advocated the more frequent use of that operation in cases of well established organic stricture, where recurrence took place after gradual dilatation, where that treatment could not be borne owing to the irritation it set up, or where the circumstances of the patient demanded speedy relief. In 1871, when he became a hospital surgeon, the practice in Dublin leaned to the use of the so-called immediate dilatation in those cases where rapid treatment was determined on; but, since then, the use of urethrotomy had become more general, and he believed bursting to have been practically abandoned by Dublin surgeons. He had burst 18 strictures in his earlier practice, and had been so impressed, both by his own cases and by those of other surgeons, with the liability to rapid recurrence after this operation, that he had relinquished it in favor of urethrotomy. He had cut 25 cases with Maisonneuve's instrument and had in no instance had a bad result or cause for grave anxiety, except in one case, where somewhat severe hemorrhage took place, and required the retention of a large catheter in the urethra. He gave his reasons for preferring urethrotomy done from before backwards, after the fashion of Maisonneuve, and recommended the incision to be made in the roof of the urethra. He argued that a catheter should not be retained in the passage after the operation unless hemorrhage took place. On this latter point, he placed much stress, and attributed to its observance the freedom he had found, in all his later cases, from rigors and inflammatory trouble; while in some earlier ones which he referred to, the retention of a catheter had, in his opinion, been the cause of such mischief.—The President believed most surgeons would concur in Mr. Stoker's opinion that internal urethrotomy should replace forcible laceration of the urethra. Dr. Barton combated Mr. Stoker's view that gradual dilatation was a temporary measure, and in the ultimate result unsatisfactory. His own experience was that it was the best treatment, if it could be adopted; and year by year, as he treated more difficult cases, he found its scope and range greater than he at first supposed. Despite Mr. Stoker's remark that internal urethrotomy was not a dangerous procedure, he had seen fatal results follow. He agreed, however, that that method gave more rapid results, but not more permanent. There were cases in which gradual dilatation could not be adopted, and in which the surgeon had to choose between bursting and internal urethrotomy. His choice in such cases would be in favor of internal urethrotomy. Both were open to risk, and could not be compared with dilatation. Again, there were other cases requiring external urethrotomy. In every case before selecting any other method of treatment, the surgeon should sedulously, carefully and tenderly try gradual dilatation. Mr. Stokes, speaking from an experience of 67 cases during the past 21 years, although his opinion of Maisonneuve's operation was still very high, did not think it should be looked upon as a royal road to the cure of urethral stricture. It was the best mode of internal division of the stricture. But he agreed with Mr. Barton that the chances of recurrence of the disease were not greater after the old and the safer treatment of gradual dilatation. Mr. Stokes also thought it better to retain a catheter in the urethra for

some time after the operation, otherwise the recurrence of the stricture was, as a rule, rapid. That was also the opinion of Maisonneuve. He agreed with Mr. Stoker in thinking the upper wall of the urethra was the best to be divided, not only for the reasons he put forward, but also those of Maisonneuve, that there was much less danger of any lodgment in the urethra, or any infiltration taking place after the operation, than when the lower wall was divided. Dr. Ball pointed out that, in the use of Maisonneuve's instrument, there was danger of injuring other portions of the urethra by the sharp edge of the knife. He knew of a fatal case in which the entire length of the urethra, from the meatus to the bladder, was slit with the instrument, the wound being deepest in the healthy parts. That danger, however, was obviated by a modification invented by Teevan, of London—a triangular sheath over the cutting edge. Mr. Corley with his experience of the three methods, had come to the conclusion that the cutting operation, as done by Maisonneuve, was the best and safest, and obviated a number of inconveniences that certainly belonged to gradual dilatation. Mr. Thompson said the real question to decide was whether stricture was curable, or, rather, what method of dealing with it would give the best approximate result short of absolute cure. The question was this: When the surgeon came to deal with a case of stricture, what method was the best for the patient; what gave the least risk; and what gave the best chance of staving off the evil day? In the great majority of cases, dilatation was that method. It was essentially the least irritating, if properly carried out. Among methods of cutting, he was entirely in favor of Maisonneuve's. Mr. Wheeler considered that recent cases were suitable for gradual dilatation, but old callous strictures were not. He could not concur in the statement that the return of contraction was more rapid after divulsion than after internal division. When there was rapid contraction, it was because there had not been sufficient dilatation by which the stricture would be fairly ruptured. Mr. Hamilton said Mr. Stoker had not removed from his mind two convictions: one, that a stricture once formed could never be removed; and the other, that a vast majority of strictures were amendable to, and ought to be treated by gradual dilatation. He was in the habit of teaching that, no matter what plan was adopted, the stricture would return. His experience was, that he was able to succeed with gradual dilatation in ten days or a fortnight. The object was to get in an instrument first, no matter how small, and he maintained, with Syme, that there was no stricture through which a surgeon could not pass an instrument, if he only had patience, and above all things, gentleness. He always held and taught that blood on a catheter or bougie, indicated that too much violence had been used. Mr. Ormsby and Mr. Falconer also took part in the discussion, and Mr. Thornley Stoker, in reply to the president's question, advocated the incision of the roof of the urethra in preference to the floor, because he considered he was cutting into healthier tissue. It was matter of observation to those who dissected diseased urethræ, that the floor was much more frequently the seat of disease than the roof. That gradual dilatation was the safest method of treatment no man of common sense could for a moment deny, or that it was the method applicable to the greater number of organic strictures. But he contended that urethrotomy might be more generally practiced than at present. Dr. Ball had referred to a well-known case where the whole of the urethra was split up; but there was no operation that was not subject to accident, and the fact that there was only one record of the kind showed that urethrotomy was a comparatively safe operation.

Famous London Doctors.—The Peoria Medical Monthly takes the following chit-chat about famous London doctors from a little book recently published, called "London Society."

"I suppose there is no one who has terrified more persons into total or partial abstinence from intoxicating fluids than Sir Andrew Clark. Yet that distinguished doctor is fre

quently to be met with at the dinner-tables of the great and wealthy. Nor, so far as I have been able to observe, does he exclusively restrict himself to some aerated water, qualified by the most trivial infusion of Scotch whiskey. He is a shrewd student of human nature, as well as, I doubt not, a considerable man of science—this canny Abderdonian.

Some years ago he conveyed to Mrs. Gladstone a deep impression of his powers. Mr. Gladstone recognized in him a careful doctor and a good High Churchman. The combination pleased the present Prime Minister, and Mr. Clark's fame and fortune were as good as made. His happy faculty of oracular utterances, the solemn aphorisms with which he clinches his counsel to his patients, the sonorous platitudes with which he emphasizes the simplest of sanitary maxims, his quick eye, the kind severity of his manner, the air of judicial sympathy with which he interrogates those who come to see him upon their maladies, the calm deliberation, the systematic shunning of the semblance of haste—these are the qualities which cause London society to repose confidence in Sir Andrew Clark. Moreover, he is, when encountered in the dining rooms of the metropolis, an agreeable and companionable person, with plenty of anecdotes and a gift of humor, the point of which is heightened by his Scotch accent. Sir Andrew Clark is a typical physician of his period, justly confident, doubtless, in his acquaintance with the British pharmacopœia, but confident rather in, and accomplishing more by, his comprehensive and microscopic knowledge of human nature.

Sir William Gull is endowed with all Sir Andrew Clark's command of noble and sagacious sentiments. If his prescriptions could be sometimes dispensed with it is worth paying a couple guineas for them; in order to store one's memory with the wise saws and mondern instances of which he is full. His presence is more that of the ideal doctor than Sir Andrew Clark's. You could not, wherever you see him, mistake him for anything but a doctor; whereas Sir Andrew might well be a lawyer, a farmer, a schoolmaster, or a parson. He plumes himself on his power of probing the secret hearts of his patients to their lowest depths by eagle glances and by pregnant and pithy pieces of professional sententiousness, enunciated in a melodramatic undertone. His manner is as perfectly calm and colleeted as is to be found in phlegmatic England itself. He can be kind as well as courteous; but whether he is simply the latter or whether he infuses into his demeanor something of the former, nothing appears to proceed from the spontaneous emotion of the instant—everything is prearranged. If he is not a great doctor as many hold him to be, he is a marvelous piece of human machinery.

The more purely social side of the medical profession is displayed by men like Dr. Quain and Sir Oscar Clayton. The latter of these I should pronounce without hesitation the nearest approach to a court physician of a century since, now extant. He is attached in his professional capacity to the household of the Duke of Edinburg, but as it was once said of an historical head master of Eton, that one could not help having a respect for a man who had whipped in his day the whole bench of bishops, so one's admiration for Sir Oscar Clayton is increased by the circumstance that he has physicked, for more or less serious, more or less noble, or ignoble, ailments the principal members of the aristocracy of England. It often occurs to me as I look upon this little knight of the lancet—well stricken in years, well made up, radiant in hair dyes and cosmetics, the secret of which rests with himself alone, deferential and insinuating in manner, with all sorts of stories calculated to suit every variety of audience, from a prelate to a demirep, at his disposal—that the spirit of the courtly leech of the Grand Monarch or of the Caroline restoration in England must be enshrined in him.

Of Dr. Quain, certainly one of the most distinguished children of Æsculapius—alas! that the child should now be marching toward the goal of septuagenarianism—it may be said that he is a cheery, kindly, genial, and a gifted Irishman first and a great physician after-

ward. Heaven forbid that when I say this I should hint anything like disparagement at that most worthy of doctors. that most staunch, omniscient, and fluently conversational of friends! Indeed, Dr. Quain is not only a Hippocrates of vast experience and profoundly scientific attainments, but a medical writer of the highest authority. He has produced within the last few years an encyclopædia of medcal knowledge. How he found time for such a chef d'œuvre is the standing wonder to his friends. The explanation doubtless is that the doctor has an extraordinary appreciation of the value of time and diet for industrial purposes. He never loses an hour or a minute. The evenings that he gives to society recruit his energies for toil, and there is, I am informed, authentic testimony on record that Dr. Quain, after an evening spent with convivial friends, prosecutes his editorial labors, literary or scientific, until the bell rings for matins—a religious service that he usually makes a point of attending.

He is a perfect treasure-house of miscellaneous anecdotes, equally charming and various as host or guest, with a professional acquaintance of men who have made their mark in all departments of life, which has usually ripened into a personal friendship unprecedented, I should think, in the history of the Royal College of Physicians. Several decades of London life have not destroyed his rich native brogue, but rather chastened it. He takes that easy view of life peculiar to prosperous, and for that matter unprosperous, natives of the Emeral Isle. He is, in a word, a medical philosopher of the epicurean type.

Dr. Morell Mackenzie is too entirely devoted to his profession to have much time to spare for the social distractions of Sir Oscar Clayton or Dr. Quain. He is probably one of the most gifted specialists in Europe, with one of the shrewdest heads on his shoulders. For these reasons he is not too much beloved by the members of his own fraternity. He is, however, as kindly as he is clever, and hospitable upon a big scale. This hospitality he shares in common with—though between the entertainments of the two there is no similarity—Sir Henry Thompson. The former is renowed for his big banquets: the latter for his small select parties, at which the number is strictly limited to eight. He calls them his octaves. At these you will find the company well assorted and easily amalgamated, dishes judiciously chosen and sound wine. Sir Henry Thompson, who is indebted for his knighthood to the surgical skill he exhibited in operating on the august person of the King of the Belgians, is also an accomplished artist, and many of the most pleasant pictures which adorn the walls of his house are from his own brush. He is an esthete rather than an apolaust. He delights in whatever lends charm and elegance to life. He takes the same sort of pride and care in his cellar, although he never touches wine, that a scientific floriculturist might take in his greenhouses though their contents never had a place in his drawing-room vases.

Each of the four doctors whose names I have last mentioned discharges distinct social services by bringing the members of various social sections into mutual communication. Politicians, literateurs, artists, actors, journalists, professional men of all grades find themselves in each other's companyunder the auspices Quain and Clayton, Makenzie and Thompson. Thus we have a quaternion of doctors who, in addition to the benefits they confer upon humanity by the exercise of the healing art, supply in the plentitude of their amiable thoughtftlness that social cement which causes society's various parts pleasant-to cohere. Such masters of medical science as Sir William Jenner and Sir James Paget constitute a more solemn class in the hierarchy of physicians. The latter is especially in favor with the Whig aristocracy, and the former is much occupied with the Queen.

New Mode of Preparation of Artificial Alkaloids.—The British Medical Journal reports: There is, in the French Pharmacopœia, an old preparation called "Alcoolat bromatique ammoniacal de Sylvius," which is an alcoholic solution of carbonate of ammonia and of various aromatic substances. This

liquid is at first colorless, but becomes brown after some time; and M. Tanret has discovered that the change is due to the formation of an oxidisable alkaloid. He has since then succeeded in obtaining artificial alkaloids by the action of spirits of ammonia on various essences and on glucose; in the latter case, several alkaloids are formed. These experiments are expected to throw some light on the formation of the ptomaines, and of many vegetable alkaloids.

PUBLISHERS' NOTICE.

We are sorry that our necessities are such as to make it necessary to call on our subscribers to pay their subscriptions. While we are satisfied that our patrons do not intentionally neglect to pay, the sum being so small, it is treated as a matter of but little importance, consequently neglected; while with us it is receiving those small sums promptly that we are able to continue to publish the journals we do, viz: The Review, Courier, Annals of Surgery, The American Journal of Ophthalmology and Archives of Dentistry.

Now, doctor, if you have not already paid your subscription up to and including 1885, you will kindly remit the amount due at once.

We dislike much to make drafts for the amount, but if not paid at once we shall be compelled to do so. As statements have sometime since been rendered for amounts due, with notice on same that drafts would be made, which we trust none of our patrons will take offense at, but will pay draft on presentation, and continue their patronage.

Butter-Milk for Children.—The Therapeutic Gazette says that Dr. R. J. Peare speaks favorably of butter-milk in the treatment of irritable stomach in children. In four cases of persistent vomiting it was tried with success. It has not the tendency to coagulate in the stomach as does new milk. He suggests that this property would seem to make it an eminently appropriate agent in the treatment of "summer complaint" of children.—

CONTRIBUTION.

COSMOPHOBIA.

BY FRANK W. VANCE, M. D., MEMPHIS, TENN.

By cosmophobia we are to understand dread of the world process. As an individual characteristic it has been recognized in its metaphysical aspect by learned essayists on character but hardly so in its psycho-pathological nature. Pascal and Carlyle are notable examples of this form of psycho-emotional aberration and the dissertations of M. de Villeman and Froude on their respective characters shows to the psychologist that even they are not free from the emotional taint which is so well pictured in their memories of those distinguished men.

To the healthy mental organism philanthropy can bring no dread, doubt no terror. The emotionally healthy French atheists do not go off into a psychical faint on contemplating their purposeless world mechanism and the fiat of everlasting annihilation.

A most marked type of cosmophobia I have met with in a gentleman acquaintance of mine—a brilliant genius in the fields of poetry and the editorial world. The God consciousness seems to be throned in his emotional nature but not as the benign being of sublimated Christian culture. The power of the world process is with him a power of evil and existence a phrensied carnival.

The life led by this person has been such as to develop what I regard as the physiological or rather pathological condition of brain, spiritually reflected as cosmophobia, viz: Irritability and debility of that part of the psychical mechanism concerned in the elaboration of intellectuo-emotional ideas. Of course a predisposition to such a mental condition exists in the individual temperament but through causes physical and moral the complete evolution of the typical cosmophobiac is brought about.

SOCIETY PROCEEDINGS.

VEREIN DEUTCHER AERZTE.

REPORTED FOR THE REVIEW.

Regular Meeting, May 1, 1885. Present 20 members. Dr. Heyer in the chair.

Dr. Lingenfelder read a paper on "Delirium Tremens." In the discussion

Dr. Curtman said that the greater part of the absorbed alcohol was undergoing a process of oxydation; first acetic acid being formed, which would appear in the urine like all acetates, as carbonic acid in combination with alkalies; only a small quantity was eliminated from the body by exhalation. Some claimed that they had found acetone in the urine after the administration of alcohol; but acetone could also be present in the urine of persons who never indulged in alcohol and there was no great similarity in the chemical composition of the two.

Dr. O. Greiner related a case where the delirium occurred thirty times within twelve years. In this instance the alcohol was not entirely withheld on account of the weak heart of the patient. The case improved rapidly under administration of tartar emetic which, however, could not be continued long by reason of the weak action of the heart. Dr. Greiner emphasized that the seeing of small animals was the characteristic of delirium tremens; a high fever he had never noticed in this affection excepting as an antemortem fever.

Dr. Heyer called attention to the fact that a high temperature was often due to complications; for instance, erysipelas following a fracture.

Dr. Lingenfelder held that cases coming into treatment after fractures are more severe than those caused solely by the excessive use of alcohol. In all cases he had obtained excellent results from the use of tartar emetic in one-fourth to one-half grain doses every two hours.

Dr. Luedeking remarked that lately paraldehyd had been highly recommended.

Dr. Curtman reported a case where he had used this drug in thirty grain doses; after the second dose sleep was secured. Previous to this all conceivable hypnotics had been used in vain. Dr. Curtman called attention to the fact that it was not so much the withdrawal of alcohol which caused the delirium as the want of nourishment; for the delirium did not make its appearance at the time alcohol was withheld, but only then when no food was taken.

Dr. Pollmann remarked that this view coincided with the belief of the laity, that the delirium would occur as soon as the patient would cease to eat.

Dr. Baumgarten said that in each case observed by him the delirium could be traced to the inanition; the delirium would also occur where no alcohol had been used; for instance, in the case of a lady who suffered from anorexia due to excessive drinking of tea. She had not been eating anything for weeks, became sleepless and imagined to see mice exactly as it occurs in topers.

Dr. Luedeking said that delirium would also occur after long continued vomiting.

Dr. Greiner.—Delirium caused by inanition is also noticed in the ship-wrecked. While this delirium is similar to delirium tremens it ought not to be mistaken for the same. The anorexia is only a symptom of the disease.

Dr. Baumgarten.—But the delirium does not occur as long as nourishment is taken and digested.

Dr. Greiner had observed the delirium such a short time after a fracture of the leg that it could not be due to inanition. The patient was a strong, well-nourished man, who was known as a big eater. Here the delirium occurred twenty-four hours after the lesion. Moreover, there are a number of instances where no delirium follows the withdrawal of food.

Dr. Heyer said he had observed cases of delirium tremens while the patients were still eating with a good appetite.

Dr. Pollmann cited a case where, after a fracture of tibia and fibula, which occurred at night, the patient became delirious the next morning.

Dr. Volquardsen warned against the use of chloral by which collapse would be easily produced in these cases.

Dr. Curtman had treated a number of cases where a simple hypnotic would not produce sleep, while a mixture of different hypnotics had a better effect; it seemed as though each hypnotic were acting on a certain region of the brain.

Dr. Pollmann reported the following case: A woman, in the ninth month of pregnancy, had a rigor with marked elevation of temperature. There was acute pain in the left hypochondric region, radiating towards the left inguinal and hypogastric regions, the chest and the left leg. There was also tenesmus of the bladder; the urine, colored moderately red and of acid reaction, became turbid upon addition of nitric acid and contains blood and pus corpuscles; no casts; the left lumbar region very sensitive on pressure. The pain lasted, with more or less remission, about twelve hours. The following twelve days the patient was free from pain, and was confined. On the third day after delivery the same pain recurred, again lasting twelve hours, and followed by attacks of less severity; then a sudden and violent attack of pain and tenesmus, then sudden relief. On passing water the stream

was interrupted and a stone the size of a pea came away. Besides this one Dr. Pollmann showed two larger stones, which he removed from the urethrae of two women who had the same symptoms as those described. One of these cases got entirely well, the other was lost sight of.

Dr. Heyer.—A short time ago a cachectic looking man, fifty-one years of age, consulted me for an affection which had existed for six months and was declared by a number of physicians to be consumption. Remarkable and at once noticeable was the loud breathing of the patient, pointing towards an affection of the larynx. The pharynx was reddened. There was no dullness on percussion of the thorax and no râles noticeable; respiratory murmur decreased, this being probably due to a laryngeal stenosis. Treatment: comp. syr. of hypophosphites and inhalations of tannin. After eight days there was not the least improvement. A laryngoscopic examination was now made, and the mucous membrane of the larynx found to be swelled and velvet-like, of a brownish-red color, and covered by tough, yellowish-white mucus. The false vocal cords thickened, so that the true vocal cords could hardly be seen; the mucous follicles were filled with viscid slime. The patient claimed to have had a chancer and sore throat 25 years ago, but never had ulcerations or eruptions nor any other symptoms pointing toward syphilis. After changing the treatment to iodide of potass. with red iodide of mercury, the patient returning in seven days could hardly be recognized again. His weight had increased twelve pounds, and the breathing was now perfectly natural. Judging by the prompt action of the treatment employed, there seems to be no doubt that the trouble had been due to syphilis.

Dr. Baumgarten reported a case of ileus in which stomach irrigation was used. A lady, æt. 58, was taken ill in January, 1883, with a severe gastro-intestinal catarrh; after a large quantity of feces were passed she recovered. The following June she had an attack of sciatica with intestinal obstruction and gastro-intestinal catarrh. After removal of old and very hard feces she again soon recovered. Until June, 1884, patient was entirely well, when she had again an attack of sciatica which got well after moving the bowels with castor oil and a clysma. Another similar attack followed in October, lasting from the sixth to the eighth of that month. Then she was well until the eighth of April, 1885, when again sciatica of the right leg made its appearance. A clysma was administered and several hard scyballæ removed, after which the sciatica disappeared, but the obstruction of the bowel continued and the abdomen became tender. Therapy: opium and clystirs. On April 14th and 15th vomitus stercoralis,and the stomach was irrigated by means of tube and funnel; considerable stercoraceous matter was removed and the vomiting ceased. Other methods, as rectal irrigation and oil clystirs, were also resorted to. On the 17th about two tablespoonsful of a stercoraceous looking but not badly-smelling matter was vomited. On the 20th again vomiting of stercoraceous badly smelling matter; second irrigation of the stomach. One bucket and a half full was removed, while only one bucket full of water was used. On the 24th again stercoraceous vomiting; in the afternoon a sudden pain in the right hypochondrium, which was not relieved by morphine. In the evening the patient died from collapse, immediately before which she was comparatively well. The sudden sinking was undoubtedly due to a perforation of the bowel. As interesting features of the case Dr. Baumgarten considered the complication with sciatica and the favorable action of the stomach-irrigation.

Dr. John Green exhibited a 4 per cent. solution of cocaine in castor-oil with one per cent. of atropia, saying that the mydriatic action of this mixture would last much longer than that of cocaine alone.

Adjournment.

AMERICAN OTOLOGICAL SOCIETY.

The Eighteenth Annual Session of the Society was held at the Pequot House, New London, Conn., July 14, 1885. The President, Dr. C. H. Burnett, in the chair.

The Business Committee was announced as follows: Drs. C. J. Blake, Roosa and E. W. Bartlett.

Dr. Chas. J. Kipp, of Newark, exhibited the work of Gustav Retzius on the Anatomy of the Organ of Hearing of Vertetrate animals.

The President reported the death of two members,

Dr. John H. Dix, Boston, August 25, 1884.

Dr. Edward T. Ely, Colorado Springs, April 8, 1885.

Inflammation of the Attic of the Tympanum.

Dr. Samuel Sexton, m. d., New York.—After showing the greater importance of inflammation abiding in the attic as compared with that abiding in the atrium, the subject

was introduced and discussed under two headings, acute and chronic inflammation of the attic, the latter had already been the object of considerable attention. It presents itself in the form of deep sinuses containing polypoid tissue, crusts, pultaceous matter, etc., leading from the inner end of the canal up into the attic, then into the antrum and sometimes through the membrana flaccida. These are often the result of acute inflammation in early life

The atticus tympanicus is that portion of the tympanum lying above a plane extending transversely from the prominence on the inner wall, formed by the external semi-circular and facial canals to the auditory plate on the outside. Beneath this plane lies the atrium tympanicum. Over the attic arches the tegmen, which also covers the antrum, the petro-mastoid canal, a varying number of cellules and the Eustachian tube. The attic communicates freely with the antrum by means of the petro-mastoid canal of Sappey. The mastoid antrum lies behind and to the outer side of the attic in the spongy substance of the mastoid. It is usually larger than the attic, and as a rule, extends downward along the cellules of the mastoid process, giving off frequently a small passage, communicating with the cllules overlying the external auditory meatus. The attic is divided below into two compartments, the inner being the larger, by the incus and malleus, the cord ligaments, etc., which form a partial partition standing fore and aft. These compartments communicate freely with each other, over head, with the atrium below, the Eustachian tube in front, and the antrum behind. The outer compartment is wedge-shaped, larger above and shut in below by the close approximation of the large oscicles to the auditory plate, except anteriorly and posteriorly where two small openings allow drainage into the atrium below. The inner compartment also communicates with the atrium by an elliptical opening surrounded on the inner side by the facial canal and on the outer by the large ossicles, the cord, ligaments, etc. All of these cavities are lined throughout with mucous membrane.

Acute inflammation of the attic may follow catarrh of the head, the exanthemata, the entrance of fluids propelled along the Eustachian tube, in bathing or from the use of the nasal douche. The very frequent occurrence of inflammation of the attic from these causes is readily accounted for when we remember that the Eustachian tube at its tympanic orifice opens by a free sweep into the attic as well as into the atrium. Irritating fluids seem always to be better borne in the lower than in the upper part of the tympanum. Inflammation of the attic may be simultaneous with, consecut ve to, or independent of inflammation of the atrium. It is the more serious from the fact that swelling of the mucous membrane clogs the outlet and prevents drainage. In such cases, the membrana flaccida is red, the vascular turgescence extending above into the external auditory canal and sometimes downwards about the short process of the mallet. Should the disease progress further, the inflammation may extend beneath the margo tympanicus of the auditory plate, followed by effusion of serum and blood which presses away the membrana flaccida and integument of the canal, producing a bulging sac, so great sometimes as to entirely conceal from view the membrana tympani and may entirely fill the canal and present at the lumen as a purplish tumor. In some cases rupture of a blood vessel of the tympanic plexus takes place producing a sudden extra-vasation of blood. The outer tumor may not at first communicate with the attic.

Periostitis of surrounding parts may occur and extend along the surfaces of the canal mastoid or squamous portions of the temporal bone. Inflammation may extend downward to the atrium, but, as long as this does not happen and the membrana tympani is unaffected, there may be little deafness, though autophonia may be present. In nearly all these cases inflammation, in some degree, extends into the antrum and mastoid cellules or those overlying the external auditory canal or in the tegmen. If the escape of secretions into the atrium or Eustachian tube is prevented, the case is more severe and extension to the cranial cavity more to be feared. Inflammation of the antrum often persists after the tympanum has healed, drainage taking place through the Eustachian tube or by a sinus through the cortex of the mastoid.

The subject of treatment resolves itself into a question of drainage, and the employment of such constitutional remedies as tend to check the inflammation and prevent the formation of pus, as aconite, calx sulphurata, etc. Owing to the impossibility of making an accurate differential diagnosis between the pains of pachy-meningitis and neuralgic pains of otitis media, we should be very cautious about trephining the mastoid where pain is our only indication. It is manifestly useless to perform this operation after pachy-meningitis has set in. Moreover, this question is one which, in any given case, must be left to the judgement of the attendiug surgeon.

DISCUSSION.

DR. ROOSA, of New York.—The remedies mentioned, mercury and calcium sulphide, are not in common use in the way recommended by the speaker. I consider a warm room, a good nurse, taking care of bowels and local measures the most important measures. The internal treatment is of expectant nature. I should like Dr. Sexton to describe a case, indicating the manner in which he would use these remedies.

DR. SEXTON.—The particular point of my paper was in regard to the inflammation of the attic, and not as regards the use of remedies. The moment there are symptoms of purulency I use the calcium sulphide and I think it controls the process. It has been used by Ringer and Otis in suppurative affections in other parts of the body. I have seen congestion and swelling over the mastoid disappear under the use of the calcium. When pus collects in the mastoid region we should lose no time in operating.

DR. J. A. ANDREWS, of New York.—I have here a drawing illustrating, a case in which the inflammation was most intense in upper part of tympanic cavity, and a perforation established between mastoid antrum and external auditory canal. The patient made a good recovery. Two months later almost the entire canal was occluded with a membrane which since disappeared without operative treatment.

DR. O. D. POMEROY.—Does Dr. Sexton believe that the administration of mercury in acute inflammation relieves this pain.

Dr. Sexton—I have never used it exclusively to relieve pain nor have I recommended it for that purpose. For the relief of pain I would recommend the use of aconite and pulsatilla.

DR. C. R. AGNEW.—When there is acute otitis media it is desirable to cut it short as soon as possible. With children there is always an indefiniteness in the symptoms. I would ask Dr. Sexton what he would do in a case of acute otitis media catarrhalis in an infant six months old.

DR. SEXTON.—In such a case I should examine the history, carefully ascertain and study the condition of the case. If there were suppuration, I should give calcium sulphide. If there was simply catarrh, I should give mercury.

DR. C. J. KIPP, Newark.—I am surprised to hear nothing said of instillation of the middle ear, which will relieve the pain. Where there is protrusion in front of the membrane, incision gives relief to the suffering.

DR. THEOBALD, Baltimore.—I have found the instillation of a warm solution of atropia of great service. A solution of the strength of four grains to the ounce. With this cathartics may be combined with great benefit. Another remedy, which has been especially recommended by Dr. Allan Smith in inflammation of other parts of the body, is the pyro-phosphate of sodium in fifteen grain doses every two hours, keeping it up for four or five days. I have used it in inflammation of the middle ear with the threatening mastoid implication, and I am convinced that it is of real value. After perforation of the drum membrane I would recommend the use of boracic acid.

DR. C. J. BLAKE, Boston.—There is an anatomical poin t which has not been referred to by Dr. Sexton, and that is the reduplication of the mucous membrane in the upper portion of the tympanic cavity. This I have found in fifteen or twenty per cent of two hundred specimens examined. These serve to separate the upper portion of the tympanic cavity from the lower. They become an important element in inflammation of this part and may tend to retain secretions.

DR. SEXTON.—I would say in conclusion that I have used mercury and the sulphide of calcium for the last ten years in a large number of cases, and I am convinced that they are beneficial in a certain number of cases. If I had to give up anything, I should rather give up the local applications than give up these internal remedies.

THE TREATMENT OF CHRONIC OTITIS MEDIA.

BY W. W. SEELY, CINCINNATI.

He said that for quite a number of years the catheter almost supplanted all other interference. Then came the addition of medicated air and vapor and injection of various fluids, astringents, irritant and alterative.

Of late years more attention has been concentrated on naso-pharyngeal affections as the starting point and continuing cause of the trouble. At this point attention was called to the possibility of treatment of ordinary pharyngeal troubles giving rise to ear complications. Every one knows the disastrous results following treatment of nasal catarrh. The great difficulty in these cases is to so treat the nose and throat as to benefit the tube and middle ear.

The speaker alluded to the abandonment of the nasal douche and the posterior nares syringe, and held that all applications to the naso pharynx should be made with care as all were liable to do harm. All of the points thus far were to justify the author's commen-

dation of the slurring of these cases by specialists in various ways, such as putting the catheter or baloon into the hands of the patient or parents, throwing over the treatment of the throat also to the patient. He claimed that this class of cases were almost all amendable to treatment and only time and patience were necessary to manage them.

The speaker thought that the attention of the general profession was becoming too much centered on the Eustachian catheter as the only means of opening the tubes. Often catheterization does harm rather than good, and some application of boric acid and vaseline, or what is still better of the yellow oxide of mercury and vaseline through the nostrils will open the tubes when the catheter has little or no effect. He said that salves had almost if not quite supplanted all other applications for nasal and naso-pharyngeal troubles.

The speaker concluded his remarks with the following:

1. That only experience of sufficient length of time (often lasting over months) in each case can determine whether treatment shall be continuous (daily) or interrupted, i. e., perhaps daily for a week, followed by an interruption of some weeks or months.

2. Only experience in each case can inform us whether treatment is to be entirely directed to the middle ear, or entirely to the naso-pharynx, or combined against both.

3. Only experience in each case can inform us whether injections into the cavitas tympuni are called for. Under this head it was stated that direct medication of the middle ear or naso-pharynx as routine treatment was unwise till simple inflation had failed.

4. Mechanical dilatation of the tubes is rarely necessary or advisable. Only in extremely dry states of the tube is dilatation followed by much success.

5. Hearing tests are not reliable, and hence patients with great deafness, great bone conduction, etc., should not be sent away till the test by trial has been gone through with.

6. Simple inflation failing, the greatest attention should be given to the naso-pharynx, even though it is in an apparently fair condition.

7. Syringing, douching and swabbing the naso-pharynx should be abandoned.

The Relations Between Chronic Catarrhal Otitis Media and Chronic Rhinitis.

BY CHARLES H. BURNETT, M. D., PHILADELPHIA.

The speaker had found a constant causal relation between chronic catarrh of the middle ear and chronic rhinitis and rhino-pharyngitis. The latter is chiefly of the hypertrophic form. The atrophic form which is made to include the fibrous degenerations and the sclerotic forms as well as the truly atrophic, with shedding of epithelium and exposure of basement membrane, constitutes about $14\frac{1}{2}$ per cent.

The appearance of the membrana tympani in the first class are very diversified; so that it is not possible to predicate the state of the middle ear and hearing from them alone. In the second class, the atrophic, the appearances of the membrana tympani, are more uniform and consistent, and the surgeon is able to judge from them more certainly concerning the aural disease. On the whole, however, the appearances of the drum cannot by themselves aid greatly in the diagnosis of chronic aural catarrh. Tinnitus aurium is more marked in the atrophic class than in the hypertophic, as a rule.

The treatment in the first class should be by cleansing and astringent sprays, with the use of preparations of iodine, never stronger than half and half. Nitrate of silver is not to be used at all in hypertrophic rhinitis. In the atrophic form the treatment must be cleansing, the removal of inspissations if they occur, and then the application of stimulant sprays, preferably nitrate of silver, not stronger than four grains to the ounce of water.

Caution is to be exercised in regard to the use of the galvano-cautery in the nares, since it may lead to inflamation in the naso-pharynx and middle ear. The aural surgeon should always examine the nares, being prepared to treat the non-surgical forms of chronic rhinitis in order to properly cope with chronic aural catarrh.

Discussion.

Dr. Agnew, New York: It seems to me that there is an anatomical objection to the use of salves and that is the impossibility of applying them to the whole of the diseased surface.

I am more willing to agree with the views of Dr. Burnett, but I think more stress should have been laid on the importance of hygiene, which is the most important element in the treatment.

Dr. Roosa: I think with the last speaker that the principal benefit to be obtained in the majority of these cases is from proper hygiene. I think that we do not need to continue our examinations very long or repeat them very often to determine whether or not we may expect to give the patient any relief. If I find diminished bone conduction I think

it unnecessary to go on and treat that patient.

Dr. Knapp: I have lately employed a salve of iodoform with vaseline with considerable advantage in nasal catarrh.

Dr. Seely: Since I have adopted the use of salves as a routine treatment, I have had more satisfaction than by any other treatment. They remain longer in contact with the affected part than do solutions, thus giving a more decided effect.

Afteroon Session.

Dr. Sexton presented a conversation tube for the aural instruction of deaf mutes. By means of this tube the patient was able to hear his own voice and compare it with the voice of the teacher.

Prof. Graham Bell was then introduced and called the attention of the society to the great number of children who were classed in institutions as deaf mutes, but who, under proper treatment and education, could be made simply hard-hearing members of society.

He also referred to the importance of otologists formulating a list of causes of deafness to facilitate the proper registration in institutions for this class of individuals.

A Case of Fatal Ear Disease, Beginning as a circumscribed inflammation of the External Auditory Canal.

Dr. C. J. Kipp, Newark, N. J.—The patient, a married woman, aged 28 years, was first seen nine months before her death. Since the previous confinement, which occurred four months before coming under observation, she had suffered occasionally with severe pain in and about the left ear. There was swelling and redness of the posterior upper wall of the external canal. There was no perforation and no otorrhea. Under the use of leeches, instillations of morphia and inflation of the middle ear, there was decided improvement in the course of a month when she passed from under observation.

Eight or nine months later the pain again appeared, shortly after a confinement. Examination revealed the presence of furunculosis. This was now recovered from, but headache appeared and became severe, the patient gradually failing and at last dying.

At the autopsy there was found evidence of intense inflammation over the entire extent of the arachnoid and piamater. There was a collection of pus immediately over the posterior surface of the petrous portion of the temporal bone. Pus was also found on the pons varoli. A small abscess was found in the anterior part of the left lobe of the cerebellum near its junction with the pons. The mastoid cells were filled with pus. There was only a thin exudation in the middle ear.

Discussion.

Dr. Burnett reported a case similar in many respects to that of Dr. Kipp, in which the patient died from what was diagnosed as cerebral abscess, but no autopsy could be obtained.

Dr. E. E. Holt, of Portland, Maine, reported the present condition of a patient from whom teratoid tumors were removed two years ago.

The patient had remained free of the disease for one year, when they again appeared, and have since progressed quite rapidly.

The Local Use of Cocaine in Diseases of the Ear.

Dr. C. H. Burnett, Philadelphia, had employed both the sulphate and hydrochlorate of cocaine to procure anaesthesia in painful affections of the ear. Neither are efficient when the pain is due to inflammation in dense tissues of the external auditory canal, nor when acute inflammation occurs in chronically thickened periosteal and mucous tissues in the tympanic cavity. The hydrochlorate of cocaine, however, is efficient to induce local anesthesia in four per cent. solution, in cases of not excessive congestion of the skin of the fundus of the auditory canal, and in the membrana flaccida of the drum membrane, as is observed in acute coryza and attended with pain of a not continuous or intense variety. The solution may be applied to the inflamed tissues either by mopping it gently upon the affected portion or by soaking a small dossil of lint and laying it upon the seat of inflammation, both procedures being done under perfect illumination of the fundus of the auditory canal by means of the forehead mirror. But solutions of cocaine are not competent to produce local anesthesia in the external auditory canal profound enough to permit painless incision into it. Local anesthesia in the membrana tympani, preparatory to paracentesis is not required, as the operation is not painful enough to demand local anesthesia.

Does Cocaine Hrdrochlorate, while Relieving the Pain in Acute Otitis Media, Prolong the Congestion?

Dr. E. E. Holt, Portland.—This question had occurred to him several times where he had used the remedy for the relief of pain in the middle ear. He was satisfied that while

cocaine relieves the pain, and for the time holds inflammation in check, yet after the effect of the remedy passes off, the inflammation goes on unaffected.

Dr. Theobald had found that in the nasal passages the drug exerted a similar effect; that, although it at first relieved congestion, yet the congestion returned and was even greater.

Dr. J. O. Green had come to the conclusion impressed by Dr. Holt.

Dr. Pomery recommends that in using the cocaine, the solution should be applied by means of a dossil of cotton which is to be allowed to remain in position for ten or fifteen minutes.

The Desirability of Adopting a Uniform Method of Expressing the Results of the Acuteness of Hearing.

Dr. H. Knapp, N. Y.—After referring to the various methods which had been recommended, the following nomenclature was suggested, in which the plan pursued in recording the condition of vision is applied to the hearing.

H. equals 24-24″ normal audition for watch.

H. equals 20-20′, normal hearing for whispered word.

H. equals 20-20, normal for conversational speech.

H. equals 20′-rs, whisper or speeeh heard but not understood; i. e., qualitative perception of sound.

H. equals 60′ equals O equals voice not heard at all; H equals O, complete deafness for all sounds.

H. equals C-24″, a watch of 24″ hearing distance is heard in contact.

H. equals Pr-24″, a watch of 24″ hearing distance is heard when pressed on ear.

H. equals M-24″, a watch of 24″ hearing distance is heard when applied to mastoid.

H. equals I-24″, a watch of 24″ hearing distance is heard when applied to temple.

H. equals O-24″, a watch of 24″ hearing distance is heard when applied to teeth.

H. equals gl-24″, a watch of 24″ hearing distance is heard when applied to the foreheard (glabella).

H. equals V-24″. a watch of 24″ hearing distance is heard when applied to vertex.

H. equals ub-24″, a watch of 24″ hearing distance is heard when applied to everywhere—, ubique.

To indicate that the watch is not heard at the places indicated the following are used: H-C-24″ equals O, H-M-24″ equals O, etc., means that the watch is not heard in contact, over mastoid, etc. H-ub-24″ means that the bone conduction for the watch is lost.

There was a general agreement as to the desirability of having some method of recording the acuteness of hearing, and a committee consisting of Drs. Knapp, Roosa and Prout were appointed to consider the subject of a uniform method of expressing the results of examinations of the acuteness of hearing, and to report in 1886.

Dr. Knapp was appointed a committee of one to present the matter at the coming meeting of the German naturalists and physicians.

Presbykousis.

Dr. B. St. John Roosa —The speaker applied this term to the failure of hearing which is incident to old age, and which is not dependent upon inflammatory affections. It comes on after the age of forty or fifty years. Such persons hear badly in a noisy room. They hear the watch, badly, but in a quiet room they can hear quite well. This is a characteristic of this affection. In inflammatory troubles with the ear, the person often can hear pretty well in a noise while in a quiet room he hears badly. These three symptoms go together, diminished bone conduction, hearing worse in a noise and the disproportion between the ability to hear the voice and the watch.

The conditions on which this presbykousis is dependent has not been determined, for as yet there has been no opportunity for a postmortem examination.

Dr. H. Knapp thought that the term presbykousis was not a good one, because if used in analogy with presbyopia it would indicate a diminished range of accommodation of hearing, which would refer more to pitch than anything else. What is meant is senile involution which occurs in every organ.

Dr. J. O. Greene has been considering the subject for some time, and had come to a conclusion similar to that of Dr. Roosa.

Dr. E. E. Holt examined a large number of persons with ear disease who claimed that they could hear better in a noise than in quiet, but was unable to find that this was a correct observation.

Dr. Roosa in conclusion said that he thought that the term presbykousis applicable as its meaning was simply the hearing of old age.

In regard to the hearing better in noise, he was convinced that patients with tympanic diseases could hear better under such circumstances, and cited the example of a lady who heard with difficulty under ordinary circumstances, but who in a boiler shop heard the ordinary voice distinctly, while her husband

with normal hearing heard only when words were shouted.

Dr. Sexton exhibited a glass ear syringe and an ear forceps with several attachments.

Dr. E. Dyer, of Newport, R. I., reported a case of fistula of the helix in a girl of fourteen which he greatly benefited by the application of the galvano cautery.

The following papers were read by title.

A case of chronic otitis media suppurativa, resulting in cerebellar abscess, with the autopsy, by O. D. Pomeroy, New York.

Otitis media suppurativa, mastoid disease, pyaemia, ma stoid operation, recovery, by Dr. G. Bacon, New York.

The meeting then went into executive session.

The following officers were elected:

President, Dr. J. S. Prout; vice president, Dr. S. S. Sexton; secretary and treasurer, J. J. B. Vermyne, New Bedford, Mass.; publication committee, Drs. Vermyne, Blake and J. O. Green; com. on membership, Drs. Carmalt Kipp and Theobald. Dr. F. L. Capron, of Providence, R. I., was elected to membership.

The meeting then adjourned.

BULLETIN OF THE NATIONAL BOARD OF HEALTH.

Washington, D. C., July 28, 1885.

The following abstracts from Consular reports just received at this office are furnished for your information. The Board will hereafter receive reports regularly, and you will be furnished promptly with all information received affecting the public health.

Place.	Week ending	Cholera..... Cases	Cholera..... Deaths	Yellow Fever. Cases	Yellow Fever. Deaths	Small Pox.... Cases	Small Pox.... Deaths	Remarks.
Antigua, W.I.	June 29	....	....	....	....	....	....	No epidemic diseases reported.
Cienfuegos, "	Month June	....	....	....	....	....	....	do. do.
Cardenas, "	July 11	....	....	....	....	....	....	do. do.
Cape Haytien, "	" 11	....	....	....	....	....	....	do. do.
Curacao, "	" 11	....	....	....	....	....	....	do. do.
Havana, "	" 16	....	....	20	4	....	....	Typhoid fever prevalent.
Matanzas, "	" 15	....	....	....	....	....	....	1 death from typhoid fever.
Nassau, "	" 18	....	....	....	....	....	....	Intermittent and bilous fever.
Laguayra, Venez.	" 4	....	....	....	....	....	....	No epidemic diseases reported.
Alicanbe, Spain.	" 11	....	....	....	....	....	....	Port and city healthy, cholera in P.
Lisbon, Portugal.	" 9	....	....	—	—	2	2	
Paris, France.	" 4	....	....	....	....	43	4	
Bordeaux, "	" 11	....	....	....	....	—	2	

Note—Upper figures, cases; lower, deaths. P. Province.

Cholera in Spain from March 4, Date of Reappearance, to July 4.

Province.	Cases.	Deaths.	Per ct. Mortality
Alicanbe	1588	646	40.6
Castellon	2617	1277	48.8
Cuenca	78	40	51.3
Madrid	1700	753	59.2
Murcia	6007	2319	38.6
Taragona	31	19	61.2
Teruel	12	5	41.6
Toledo	455	207	45.5
Valencia	14928	6851	45.5
Zaragoza	628	280	44.7
Total	28044	12347	

CORRESPONDENCE.

NEW YORK LETTER.

New York, August 1, 1885.

Editor Review: Medical work is now partaking in a large degree of the stagnation incident to almost everything here in New York, on account of the heated term. The number of cases of sunstroke this year has not been as large as usual. This is probably owing to the fact that even the laboring classes have at last begun to pay some heed to sanitary rules published by the Board of Health and republished and scattered far and wide by the daily press. The duration of the heated spell beginning about the middle of July was about ten days—an almost unprecedented limit.

The numerous calls for immediate medical service again illustrated the perfection of the New York ambulance system, which now for years has given such excellent satisfaction and is being copied by other cities.

The operation of digital dilatation for stenosis of the pylorus following ulcerous cicatricial contraction was recently done on two patients in St. Luke's Hospital. These were the first cases so operated on in this country. Both resulted fatally. So also did an operation for resection of pylorus done some time ago in Roosevelt Hospital. The operative service now is quite light in most of the hospitals excepting in the New York, where, in the service of W. T. Bull, considerable has been going on. The hour of the clinic at the latter institution has been changed to ten in the morning.

The latest addition to our list of new remedies which has attracted any attention is paraldehyde—a crystalline body, somewhat resembling chloral in gross physical appearance and with al-

most an identical physiological action. Its great advantage, however, lies in the fact that it does not affect the heart action and hence can be given as an hypnotic in states of depression where chloral would be contraindicated. The commencing dose is half a dram, in some mucilaginous vehicle, and it can be cautiously increased up to a dram. It is being quite extensively used in all the dispensaries now, and nothing but praise has thus far been said in its favor. Antipyrine still retains its place at the head of the antipyretics. Your correspondent had an interesting conversation the other day with an oculist on the subject of the anesthetic properties of cannabis indica. He ventured the opinion that the chemists would possibly succeed in extracting from the plant a crystallizable alkaloid which might rival even cocaine.

The Seventy Eighth Annual Announcement of the College of Physicians and Surgeons has recently been issued. The class last year numbered four hundred and ninety. The allusion to Mr. Vanderbilt's gift is as follows: "Upon October 18, 1884, occurred one of the most important events in the history of the college, viz., the receipt from William H. Vanderbilt, Esq., of New York, of the magnificent gift of twenty-nine contiguous city lots of land costing two hundred thousand dollars in money, wherewith to erect upon this land a new building suited to the present medical education. The site is immediately opposite the Roosevelt Hospital, the ample clinical facilities of which will thus become directly available for the use of the college. Work upon the new building is proceeding as rapidly as possible." There is a slight sarcasm attached to this last fact, as the truth is that solid rock was found just under the surface of the ground and nearly the entire cellar has had to be blasted out. The building, it is understood, will be large, but quite plain. Its equipment will doubtless be all that could be desired. It is believed that it will not be ready for use before the fall of 1887. Its completion together with that of the new dispensary building of the Roosevelt Hospital will greatly enhance the architectural beauty of that part of the city.

The college catalogue also announces that the two years course styled "Preparatory to the Study of Medicine" at the Cornell University, the Sheffield Scientific School of Yale College or the Johns Hopkins University is accepted in place of six months study with a preceptor in the case of a student who afterwards attends these sessions at this college." The meaning of this last clause has reference to the state law requiring thirty-six months study of all candidates for graduation. If a man enters in the fall and attends three sessions his time reckoned up to graduation day is only thirty-one and one half months. The above prelimlnary work will now satisfy this deficiency. The step is regarded as one in the right direction.

Speculation is now rife here as to what compensation is properly due to the physicians of the late ex-president. Many think as Dr. Douglass gave up his whole time to his illustrious patient for four months twenty thousand dollars is not too large a fee; on the other hand, others recollect the experiences of Garfield's physicians—the amounts of their bills and the discussions thereat, and place the amount at a much lower figure. The two cases are hardly parallel, however. As to the amounts due Dr. Shrady or Dr. Sands, no opinions have yet been ventured. In justice to the three, however, it must be said that the profession here has from the first had the utmost confidence in their diagnosis and treatment. J. E. N.

ITEMS.

—An Important Source of Professional Happiness.—While perfect happiness may not be the lot of mortals, probably physicians have as much enjoyment as any similar body of learned and useful gentlemen. Apart from professional study and work faithfully done, there are for the doctor peculiar sources of happiness—wayside flowers which bloom only by his path. One of these sources is in his correspondence, and as this correspondence differs in subjects, so there are varying degrees of happiness which it gives him.

His morning mail, we will suppose, brings him four letters. The first is from the Universal Utopian Insurance Company, and encloses a blank containing various questions as to the professional standing and ability of Dr. A——; as to whether he is expert in physical diagnosis, as to his sight and hearing and as to his moral standing—nothing as yet in the form as to the color of eyes and hair, his complexion and religious and political proclivities; "your answer will be strictly confidential," Not having seen Dr. A—— for many years, and possibly having only the slightest acquaintance with him, one is often sorely tried to answer the questions so that no injustice may be done either to the economical company which in part trusts you to select its examiners, or, it may be, to a most worthy member of the profession, and it is in the effort, and in the accomplishment of this high end that happiness is secured.

The second letter is from a very clever doctor who wishes you to recommend him for an office; he is weary of professional life, and burns with the noble desire to serve his country at Washington, or in a foreign consulship. How delightful

it is to assist him in his lofty ambition, especially when he requests you to append your signature to the letter of recommendation, a statement of such titles as you may have, thereby impressing with your consequence the powers that be, who otherwise probably do not know you from any other son of Adam. The mere accidents or adventitious circumstances of your life are thus used to help him. Of course. it delights one to to comply fully with the instructions.

The third letter is from a doctor who desires you to diagnose a case of which he gives you a megere history, often confused by non-essential opinions and facts, and also to suggest a plan of treatment. With the patient before him and ample opportunity for thorough examination he has failed, but depreciates his own ability, and exalts you in supposing that you will succeed without such opportunity. The compliment thus paid is very high and is received with great gratitude. In your earnest study of the case as presented by letter, the mind is quickened, knowledge revived or sought, feelings of benevolence and kindness excited—a sincere desire to help your professional brother and a suffering fellow-being exercised—and hence an unfailing joy.

But the fourth letter lifts you to the highest altitude of happiness. It comes from a reputable member of the profession who believes that all professional truth is to be reached by arithmetic; statistics are the alpha and omega of his life; only have enough figures properly arranged —columns broad enough and long enough—and the human race will be lifted to dwell forever in the clear and serene light of perfect knowledge.

Undoubtedly statistics have their value in medicine, but they must include only essential facts; they must relate to cases the conditions of which are like, they must be furnished by competent observers, and their accuracy secured by an actual record of observations made at the time of the occurrence of the cases, not trusted to uncertain memory; finally, they must be used, when collected, for the acquisition or truth, not for the establishment of a preconceived theory. How often, however, does the series of questions which the seeker for statistics presents you show that he is endeavoring to sustain a particular plan of treatment, instead of being, for the time, an intelligent, just, and unbiased judge; or else it contains interrogatories, some pertinent, some impertinent, hypotheses probable and improbable, possible and impossible, consistent and inconsistent. Dr. A———, for example, is preparing to read a paper upon diarrhea before a local, State, or national organization, and his questions run possibly somewhat thus: How many cases of diarrhea have you seen in your ten, twenty, or forty years professional life? Was heredity a factor in the production of the disease? If your answer is negative, do you not believe it might be in some cases? Do you believe microbes are the essential cause of the disease? If green apples were the exciting cause, specify the number, kind, and size of the apples; if the disease was attributed to "teething," please state the particular teeth concerned. What were the thermometric, barometric, and ozonic observations made when the disease was most prevalent? Do you believe that the induction of premature labor is advisable in some cases of obstinate diarrhea? If premature labor be induced, would you use two ligatures or one for the cord? Please give the hygienic and therapeutic means which you have found most successful in the treatment of diarrhea. Have you ever used germicides in the treatment?

Other questions of equal pertinence and importance are presented, and to answer fully all requires a large amount of patience and prolixity, and some pages of manuscript. But patience, prolixity and pages are cheerfully given in the desire to gratify, it may be, a most worthy member of the profession, and to promote medical progress, while the proud consciousness of having done this affords unspeakable pleasure.—Medical News.

—The Illinois State Board of Health is now engaged in revising the "Official Register of Physicians and Midwives." Any notification of changes, omissions or errors will be regarded as a favor, as the Board wishes to make the coming register as correct as possible. Address Secretary State Board of Health Springfield, Ill.

—Sgerlecki recommends for the cure of oxyuris vermicularis injections of codliver oil, six tablespoonsful twice a day, and maintains that this treatment is always sure of success.—Jahrb. f. Kinderhk.

—Dr. Fehling, of Stuttgart, the inventor of the well-known test for sugar, is dead. He died July 1st, in his 73rd year.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, and U. S. Marine Hospital Service, for the two weeks ended July 25, 1885.

Fessenden, C. S. D., Surgeon. Leave of absence extended eight days on account of sickness. July 20, 1885.

Irvin, Fairfax, Passed Ass't. Surgeon. Granted leave of absence for ten days. July 14, 1885.

To inspect unserviceable property at St. Louis, Mo. July 15, 1885.

THE WEEKLY MEDICAL REVIEW.

OBSTETRICS AND GYNECOLOGY.

VOL. I. No. 32. CHICAGO AND ST. LOUIS, AUGUST 8, 1885. TERMS: $3.50 A YEAR.

A CONDITION OBSERVED IN THE NAVEL CORD OF A YOUNG INFANT.—Dr. John Williams read the following paper before the Obstetrical Society of London (Obstetrical Transactions):

The subject of the condition described in this note was a fine, well developed, healthy male child, born at term. The cord was tied about three inches from the navel; it was short and thick, but otherwise presented no unusual appearance. On the second day, however, the nurse called my attention to a condition which seemed to her unusual.

On examination I found the terminal two inches of the cord dry and shriveled, while the proximal inch retained the fresh and succulent appearance it had at birth. To the finger, however, it felt firm and hard. During the third, fourth and fifth days its surface softened, began to break down, and to emit an offensive odor; this was destroyed by powdering the part with iodoform. There was slight bleeding on the fifth day, but the cord did not fall off until the ninth day after birth, and the somewhat conical stump then remaining presented an ash-gray, shreddy surface, having a little red depression about the size of a pin's head at its apex. In fact, the root of the cord remained intact except a thin sheath which sloughed from its surface. Its size had remained much the same except for the removal of this sheath.

At this time Sir James Paget saw the child with me, and it was thought advisable, should the mass remain, to treat it as the so-called wart of the umbilicus and remove it by ligature.

On the eleventh day it had diminished to about one-half its original size, but it still presented the same ash-grey surface. Very lttle moisture oozed out of it. On the fourteenth day it had decreased to a quarter of its original size, and on the following day it had disappeared altogether.

This appears to be the earliest condition of the so-called fungosity, wart or excreseence of the umbilicus, seen in children up to the age of eight or ten years. In so far as I know it has not been observed before the eight day after birth.

Duges described the fungosity of the umbilicus in the Dict. de Méd. in 1837. Mr. T. W. King published a case of great interest in a paper on "Feculent Discharge at the Umbilicus," published in "Guy's Hospital Reports," for 1843. The case was observed by Messrs. Parsons and Gunthrope, and is as follows:

"In March, 1841, Mrs- L. was delivered of a fine, healthy male infant. At the expiration of eight days I was called upon to examine the child in consequence of a fungus occupying the umbilicus and supposed to have been produced by the nurse pulling at the remains of the funis, and which I also understood she had cut off close, owing to its resisting her efforts to remove it. This fungus was removed in the course of a few days by caustic. The liquid contents of the alimentary canal then commenced oozing through an opening at the umbilicus; by degrees the discharge increased, being of various hues, attended by great emaciation."

After various plans of treatment the opening cicatrized, but the child died subsequently of thoracic disease. "On examining the abdomen, about a foot and a half from the cecum, a diverticulum nearly five inches long, extended from the convexity of the ileum to the umbilicus, to which the extremity was firmly

attached. The umbilicus without appeared pretty natural, excepting a little central spot of granulation as wide as a pea."

Simpson mentioned fungosities of the umbilicus ("Obstet. Memoirs," 1856), and stated that they sometimes disappear without treatment.

Athol Johnstone described them in his lecture on the "Surgery of Childhood," and pointed out that a probe could be passed into some of them for two or three inches, but that he had found it in no instance lead to the bladder or urine pass through it.

Kolaczeck described these tumors in the Archiv f. Klin. Chirurgie, Bd. 18, 1875, under the name of "Entero-Teratome." These presented glandular structures precisely similar to Lieberkühn's glands.

Küstner (Virchow's Archiv, Vol. 69) described two cases in which the growths presented a similar structure, and with a similar love for technical names called it an "adenoma." He had examined also ten other cases of fungeosity which he found composed of granulation tissue, and he called this form "granuloma."

Fére has subsequently described two cases (Le Progrès Medicale, 1869); both were composed of embyronic or granulation tissue in earlier or more advanced stages of evolution. He called this structure sarcomatous—a very misleading appellation, for he appears to mean by it nothing more than granulation tissue.

Fecal and urinary fistulæ have been found at the umbilicus, and in one case, mentioned above, the fecal fistulæ was in a wart of the navel. These fistula were proved post-mortem in King's cases to be the openings of the diverticulum ilii, the end of which had remained permanently fixed in the umbilical ring. Moreover, Ahlfeld has found remains of the umbilical vesicle or yolk-sac in the root of the navel cord at term so that the explanation of the presence of glandular tissue in these small growths is furnished by the case of King and the researches of Ahlfeld. I know no cases in which the wart of the umbilicus co-existed with a urinary fistula. Sir W. Bowman, in his case published in Vol. 33 of the Medico-Chirurgical Transactions, makes no mention of it. The subject of the fistula was, however, a grown-up person, and it is possible that had a wart been present, it would have acquired the ordinary appearance of the skin of the umbilicus and attracted no special attention.

It is not known with certainty what becomes of these fungosities when left alone. Some of them disappear, as stated by Simpson, and as occurred in my case. Many, however, remain for years as a vivid red painless growth in the depression of the umbilicus, causing a good deal of irritation by the secretion from their surface.

In other cases again the epithelium on their surface probably becomes horny, and the growth acquires the appearance of the neighboring skin. Küstner, in one of the cases examined by him, found it covered with epidermis on the fourteenth day. He has also observed a wart-like growth on the umbilicus in two pregnant women. I have noticed this in several pregnant women; the growth was soft, of a darker color than the surrounding skin, and seated on one side of the naval scar. These are probably the adult state of these fungosities when left without treatment. They are, however, usually removed by ligature or scissors. Küstner states that an artery runs in the adenoid form, and that it spurts when cut across. Astringents and even caustics have been tried. In some astringents have proved effectual, in others both astringents and caustics have failed. The ligature has, I believe, whenever tried proved effectual and free from danger, the growth falling off in from twenty-four to forty-eight hours after its application.

Antisepsis in Labor.—Dr. Otto von Herff, in a paper read before the "Verein hessischer Aerzte," at Darmstadt (Archiv für Gynaekologie, Bd. xxv., Hft. 3), advises the following antiseptic procedure in labor cases:

I. Careful disinfection of the physician, midwife and nurses.

II. At the biginning of labor the external

genitalia should be washed with a weak solution of corrosive sublimate; the pubic hair should be shortened.

III. During the progress of a normal labor, prophylactic irrigation of the vagina is not necessary. Vaginal injections are indicated only in such cases where there is a suspicion of a possible infection, either through the midwife or through disintegration of the secretions in delayed labors; weak solutions of the bichloride should here be used, as 1 to 5000 or 1 to 3000.

IV. The same is true regarding prophylactic uterine irrigation immediately after normal labor; it is not necessary. It should be used, however, in special conditions, as, in cases in which the hand has been introduced into the uterus, or where intra partum decomposition has taken place in the uterus, or after the birth of a dead, macerated fetus, etc. Weak solutions, of the same strength as given above, should here be used.

V. If labor has progressed normally, and the period after it also, there is no indication for vaginal or intra uterine irrigation. But in puerperal diseases either a weak or a strong solution of the bichloride is indicated and is generally followed by immediate success.

VI. The stronger solutions of corrosive sublimate, especially that of 1 to 1000, should only be used in urgent indications, as, for instance, in dangerous septic puerperal fever.

VII. In all cases of irrigation by corrosive sublimate, vaginal as well as intra uterine, with weak or with strong solutions, the following precautions are strictly to be observed:—

1. Only a small quantity of the solution should be used, not more than two litres, one litre generally sufficing.

2. The irrigation should be ended as rapidly as possible.

3. Care is to be taken that there is attained during and after irrigation a free and complete drainage of the disinfecting fluid, so as to prevent any retention of the same.

4. In cases of atony of the uterus, or in large wounds of the genital passage, irrigation with corrosive sublimate is not to be employed; nor should these irrigations be used (if there is any chance of getting along without them) in anemic individuals, or in persons suffering from kidney disease, or in women who have been treated with mercury at a former time.

5. Intra uterine irrigations of corrosive sublimate and especially those of the stronger solution, are to be given by the physician himself. Expert midwives, however, may be permitted to give simple vaginal injections with solutions of the strength of 1 to 5000.

6. The instruments used for irrigation should give a continual stream with but slight pressure. Absolute cleanliness of instruments as well as of the entire surroundings is to be strictly attended

If these precautions are observed, there is no probability of the occurrence of poisoning by corrosive sublimate, whether vaginal or intra uterine injection have been used. The advantages of this drug are, aside of its certain antiseptic properties, its cheapness, its solubility, and its odorlessness. Occasionally, in sensitive women, it causes a severe burning sensation of the genitals, lasting for hours; the author observed three such cases in which he used a solution of 1 to 3000. Another objection to the drug is that it affects metal instruments.

Treatment of Subinvolution.—Dr. F. Ellingwood (Chicago Medical Times) considers fluid extract of ergot and bromide of potassium as specifics in subinvolution. Regarding the benefit to be obtained from electricity we quote as follows:

"Electricity is a most powerful adjuvant and, if used in the form of the mild galvanic current, will rapidly produce an amelioration of the symptoms, and if used immediately subsequent to confinement will absolutely prevent the conditions and the long train of evils which will surely follow, and will restore the womb rapidly to its normal condition.

It is the writer's positive opinion that the galvanic current judiciously administered early, will accomplish in three week, by assisting the normal involution of the womb, what nature requires six or eight weeks to ac-

complish, without a single untoward symptom, and is thus especially applicable to those cases where circumstances seem to force the patients to resume their usual tedious daily round of duties earlier than is beneficial to a rapid and complete natural restoration of the uterine parenchyma."

Electricity in Obstetrics.—Dr. W. T. Baird presents in the July number of the American Journal of Obstetrics, the following tabulated comparison of ergot with electricity:

Ergot.	Electricity.
1. Action slow—no response until after 20 or 30 minutes have elapsed, thus losing time, thereby occasionally proving fatal to the patient.	1. Action instantaneous, thus economizing time, and so in some cases proving of great value to the patient.
2. Action uncertain; in some instances it will entirely fail to produce uterine contractions.	2. Action certain; it need never fail to produce uterine contractions.
3. Action uncontrollable; it will sometimes "lash the uterus into a fury," which may produce laceration of the cervix or perineum.	3. Action under perfect control of the operator; therefore it may never endanger the integrity of the cervix or perineum.
4. Action always followed by shock, and sometimes by great exhaustion.	4. Action never followed by either shock or exhaustion.
5. Action attended with danger, and always with an increase of suffering.	5. Action harmless, and always attended with a diminution of suffering.
6. Action continuous, allowing no time for rest, thus violating one of the wisest provisions of nature.	6. Action rhythmical, "giving ample time for rest," thus simulating nature.
7. It cannot be safely employed until dilatation of the os is well advanced; therefore its use is restricted to the latter part of the second and to the third stages of labor.	7. It may be employed as soon as the first labor pains set in, and thus facilitate the labor in all of its stages.

Further on, in the same paper, the author gives the special indications for the employment of electricity as an oxytocic. He states that electricity may be deemed indicated in any case where it may be desirable

1. To modify the pains of labor.
2. To favor a more rapid dilatation of the os.
3. To promote more vigorous uterine contractions.
4. To add tone and strength to all the muscles engaged, and "increase their power of doing work."
5. To abridge the time occupied by the labor.
6. To prevent shock, exhaustion, and post-partum hemorrhage.
7. To insure contraction of the uterus in cases of instrumental delivery.
8. To act as an auxiliary in the induction of premature labor.
9. To arrest hemorrhage, and accelerate labor in cases of placenta previa.
10. To prevent an undue expenditure of nervous force, in all cases of debility from whatever cause, thus leaving the patient in a condition to secure a speedy and favorable convalescence.

Application of Corrosive Sublimate and Glycerine in Epithelioma of the Cervix Uteri.—Dr. Biddle (British Medical Journal) states that but few things in the way of palliative treatment have given him greater satisfaction than the use, in a case of epithelioma of the cervix uteri, of a lotion or injection, containing one-fourth of a grain of corrosive sublimate and half an ounce of glycerine to a pint of water. Before using it, a patient of his had, for seven or eight months, been subject to paroxysms of agonizing pain and to frequent hemorrhages, which were occasionally profuse. Immediately upon its employment, and for the last three months of her life, the hemorrhage became merely nominal; and, instead of agonizing pain, there was simply the distress consequent upon irritation (by the tumor) of the bowels and bladder, the latter of which became perforated a week before death. He attributes the beneficial change to the very marked reduction in the amount of infiltration. The lotion was used continuously, with very few exceptions, twice a day during the three months, and he shall certainly adopt the same treatment in the next case he has, even before re-

covery is depaired of. In the case referred to, it was not tried until the curative effects of chromic acid had been tried in vain.

Fetus Papyraceus.—At the Obstetrical Society of Boston, Dr. W. L. Richardson showed a specimen which had been sent to him by Dr. R. A. Kingman. The woman had been delivered at full term. An examination of the placenta showed a second placenta which had undergone complete fatty degeneration, and in the membranes attached to it was a flattened fetus, the growth of which had been arrested during the fourth month, as shown by its length and the ossification of the bones. Dr. Richardson said he had seen a similar case at the Boston Lying-in Hospital, in which with triplets one of the children had died at the third month. The pregnancy had gone on uninterruptedly and the labor was normal.

Dr. Kingman, present by invitation, said: The patient from whom the specimen came is a primipara, twenty-seven years old, a large, stout, healthy woman. With the exception of moderate nausea and vomiting, extending over nearly the whole period of pregnancy, she has had no illness since conception. After a normal labor, a healthy female child of six pounds in weight was born alive and has maintained a vigorous existence since that time.

The pregnancy was supposed to have dated from the latter part of April, 1884, at which time the menstrual period ceased, but the labor did not occur until March 8, 1885. No difficulty was experienced in expressing the placenta, the membranes following readily a few minutes later.

Obstetric Oddities.—Dr. E. H. Keith relates the following three remarkable cases in the Peoria Medical Monthly:—

Case I.—September 12, 1884, I was called to attend Mrs. H. in her second confinement; æt. 22, a blonde and far below medium size. Examination discovered the os well dilated, with membranes tense and protruding. The head was certainly presenting, but it was the strangest head I had ever found presenting. The membranes ruptured during the examination, and the most fearful gush of water flowed from the patient that I had ever witnessed. On further examination I found two soft, yielding globular bodies standing far out beyond the general outline of the face. The nose and mouth could be outlined. When I attempted to reach the top of the cranium my fingers slipped over a rigid bony edge into a chasm of soft shapeless material. As I knew not what was following this strange mass, I desired counsel and sent for my friend, Dr. J. L. Hamilton. When he arrived, I explained to him the situation as far as possible, and asked him to make an examination, and while he was doing so the anomaly was born. The body of the child was that of a girl, plump and very large. The eyes were large and protruding. The cranium was entirely absent, and a sac filled with a substance resembling a small liver was in place of the brain. I intended making a further examination of the child in the morning, but it was taken away and buried before my visit.

The extreme size of the child, the shoulders being very broad, caused an extensive rupture of the perineum, which was immediately stitched and healed by first intention.

Case II.—6 a. m., October 21, 1884, I was called to see Mrs. L., the mother of one child; found her flowing badly. She said she had a miscarriage twelve hours before, and two hours previous to my arrival a second fetus had passed, and since the last had been flowing severely. I immediately removed a single placenta about 3 by 4 inches in diameter. The peculiarity of this case is the first fetus which seemed to be, from its size, of about two and a half months gestation, and the last of about four and a half months gestation, both free from decomposition. There was but one placenta and a single cord. Was this a second conception, two months after the first, or a case of retarded development?

Case III.—Was called, October 26, to attend Mrs. B. in her second confinement. Patient had been having occasional labor pains

during the last two days, but now they were occurring every ten or twelve miuutes. Os dilated and soft. I discovered that I had a breech presentation to take care of. I discovered also that there was no sac of water and no membranes, as well as a dead fetus and an anomaly. The second stage was completed at the end of four hours after my arrival, and there lay a child just born that had been dead about three weeks. It was of about eight months' development. Its lower limbs were flexed upon the stomach and breast, and were united firmly together from the breech to the little toes; not a sulcus or groove between the limbs to indicate the point of connection. The bones of each limb were perfect, as they were easily traced through the decaying tissues. I was unable to determine the sex of the fetus. The third stage of labor was completed without difficulty. The uterus had contracted into a globular form and was quite compact and solid. I feared septic poison in this case, and at the end of the second day it was strongly manifested. Within a week, however, all septic symptoms had disappeared, and the recovery was complete.

Secretion of Milk Stimulated by Eating Oranges.—An interesting case is reported in the North Carolina Medical Journal, in which the secretion of milk was greatly stimulated by eating oranges. To test the effect, the fruit was omitted for a few days when the secretion ceased. It was soon brought on, however, by a return to this fruit diet. If at any time the flow was not free, one or two oranges would increase it abundantly in an hour or two. Previous to using the oranges the patient gave no milk and the child was fed artificially.

Morphine in Extra-Uterine Pregnancy.—Dr. Rennert, of Frankfort-on-the-Main (Pacific Medical and Surgical Journal) destroys the fifth month fetus by injecting with a hypodermic syringe one half grain of morphine into the fetal head, through the abdominal wall of the mother.

SOCIETY PROCEEDINGS.

MARION COUNTY MEDICAL SOCIETY.

REPORTED FOR THE REVIEW, BY DR. E. M. FERREE.

Stated meeting, Tuesday, June 2, 1885. The President, F. N. Bryan, M. D., in the chair.

Dr. Joseph Eastman reported a case of

Total Absence of Vagina, with two Years Retention of Menstrual Fluid—Operation—Recovery.

Miss X., 15 years of age, has suffered for the last two years with periodical pains through the pelvis; these pains became worse each month and their interval gradually diminished until they were almost continuous; she also experienced much pain and difficulty in defecation. This suffering caused her to become pale, emaciated and generally anemic.

On examination Dr. Eastman found a tumor in the right iliac region, shaped like a gourd, about 4 inches long and 1½ inches in width. The labia majora and minora were found well developed, but no trace of a vagina was present.

Her home was in a neighboring city, but on the advice of a friend she came to Indianapolis and entered a hospital for treatment.

Under an anesthetic Dr. Eastman diagnosed a distended uterus and Fallopian tube containing menstrual fluid; with a sound in the bladder, steadied by an assistant, and a finger in the rectum, he cut through the integument, making an opening large enough to introduce his finger; and with his finger and the handle of a scalpel he dissected up the tissues to the uterus, and when this organ was reached, he plunged a trocar into the tumor, and over a pint of thick black blood, resembling molasses, escaped through the opening; this he believed at the time to be all that the cavity contained, as the tumor was shrunken in size, but in washing out the cavity through a canula an additional pint of fluid passed off. To prevent forcing any of the fluid through the Fallopian tubes into the abdomen a canula with a backward current was used.

At the operation the trocar had been forced through the uterine wall, but about three days afterwards, while trying to find the opening made by the trocar, Dr. Eastman succeeded in finding the os uteri, and subsequent drainage was kept up through this natural opening. The uterus was washed out with carbolized water, and a drainage tube left in the vagina until all discharge ceased. After she recov-

ered from the operation she was sent to her home with a Sims' vaginal dilator to prevent the vagina from closing.

About six weeks afterwards, while being in the city where the patient lives, Dr. Eastman was informed that she had been suffering considerable pain; on examination he found the os uteri closed; this he dilated and withdrew with a catheter about half a pint of pus.

Since this time she has menstruated once normally, and if occlusion of the os uteri does not again occur, Dr. Eastman thinks she will soon perform the menstrual function regularly.

The doctor also spoke of a case of rentention of the menses of ten months duration, caused by closure of the os uteri; this case was complicated with retroversion; here he opened with a scalpel an occluded os, and three pints of fetid menstrual blood escaped. On visiting the patient on the third day, she was up and scrubbing the floor, and insisted on having the house clean when the doctor came.

Dr. Bryan desired to know how far a physician is justified in pressing the necessity of an examination to decide the course to pursue in the future treatment of a case.

Dr. Maxwell was interested in this case, having advised the patient to come to Indianapolis and place herself under treatment. He thinks that the operation will prove a complete success, not only in relieving the patient, but also in making her able to fulfill the duties of her sex. One point not mentioned in the history given, was that when the uterus was not washed out every day or two, septic fever would occur, the temperature sometimes reaching 102° or 103° F., which would quickly subside by washing out the uterus. In regard to Dr. Bryan's query, he thinks in all cases where there is any doubt as to the correctness of the diagnosis an examination should be made, and cited an example of a retroverted uterus which was quickly relieved by the proper means.

Dr. Waterman coincided with the views of Dr. Maxwell. He related the case of a child of 9 years who had menstruated regularly for a year, but was at present menstruating too freely.

Dr. Brayton cited a case illustrating the fact that we should not allow the modesty of a patient or anything else to prevent us from thoroughly investigating these cases. A young woman came to him to have the fragments of a broken needle extracted from her hand; hearing her cough, he enquired for the cause, and was told she had consumption, and had been under treatment for that disease for some time. She had frequent hemorrhages from the lungs. On farther investigation he satisfied himself that it was a case of vicarious menstruation.

Dr. Keegan thought that, in Dr. Eastman's case, there could be trouble in after life, as the canal made by the operation was an artificial one and would not grow, as the natural one does. He considered it proper in such a case to advise the patient not to marry.

Dr. Woolen asked Dr. Eastman for what reason the opening was enlarged latterly instead of antero-posteriorly.

Dr. Eastman stated that the incisions and ilatation were made latterly on account of the thinness of the structures between the bladder and the vagina.

In regard to marriage after such operations, he thought that nature always endeavored to rectify the cases after instrumental assistance. If this operation should fail to give relief he should open the abdomen and remove the ovaries, as he was prepared to do at the time the related operation was begun, but having succeeded so well in relieving the patient by this plan, he decided not to remove the ovaries unless further trouble ensued.

He abhored the habit of examining young ladies by the vagina, but thought it could be much more satisfactorily done per rectum or bladder.

In the case of a young lady who had been treated for a long time for a nervous affection, an examination revealed an irritable ulcer as the whole cause of the trouble.

Dr. Frank Ferguson remarked that an examination per rectum was certainly much more revolting to a delicate woman than a vaginal examination. He fully agreed with the speaker that a physician, suspecting a diseased uterus or vagina, should thoroughly investigate.

CORRESPONDENCE.

ANTEPARTUM HEMORRHAGE.

Kansas City, Mo., July 23, 1885.

Editor Review: At one o'clock a. m., July 20, I was hastily summoned to see Mrs. R., aged 34, multipara, with a violent uterine hemorrhage. I found the lady very much excited at the unexpected gush of blood which came on in her sleep without any warning or premonitory signs. She stated her pregnancy had not been attended with anything unusual, that she had been enjoying

good health during gestation, and that she was not expecting to be confined for some three weeks yet. As soon as I entered the room and saw the condition of things, I at once suspected placenta previa. On making an examination I felt a gush of blood streaming over my hand, and passing my finger into the vagina I could not at first touch the os. The vagina seemed to be distended like a balloon; on making firm pressure upward and bcckward I was enabled make out a vertex presentation, the child being in the first position. Carrying my search further I found the os pointing toward the promontory of the sacrum. I hooked my two fingers into the os and drew it forward. Now I felt the child's head drop, as it were, into the superior strait, and at once the hemorrhage ceased. Then I began an exploration to find the placenta, where I expected to find it, but there was no placenta in reach. At this period I could distinctly make out the presentation which was as before stated. A few feeble pains manifested themselves at long intervals, and a slight hemorrhage occurred with each succeeding pain. I was somewhat at a loss to know what to do. The os was not dilated and no particular effort at labor. For fear of a return of the hemorrhage I determined to induce labor at once. I gave a drachm of fluid extract of ergot which in a short time brought on pains of a persistent character, sufficient to hold the child's head firmly wedged within the superior strait in such a way as to act as a plug, thereby preventing any more flooding. My patient had lost enough blood to blanch her features and weaken her pulse to an alarming degree. Things remained in about this condition until 7 A. M., when labor set in with a prospect of a speedy delivery, which terminated happily at 9 A. M. The placenta followed within a few minutes, the uterus contracting firmly, and there has been no untoward symptom since. The child, a female, weighed ten pounds. I am satisfied the hemorrhage came from no other source than the placenta, for on examining it carefully after delivery I could determine where it had become detached before the birth of the child; I found a space on one edge about four inches long by two inches wide which was filled with blood, evidently effused some hours, as the balance of the placenta showed recent detachment, being clean and smooth. J. W. FOSTER, M. D.

"*A CASE OF FACE PRESENTATION.*"

COLUMBUS, WIS., July 14, 1885.

Editor Review:—In the obstetrical and gynecological department of the WEEKLY MEDICAL REVIEW of July 4th (page 211), the following singular passage from an article on "Face Presentation," taken from the "British Medical Journal," can be seen: "After passing the catheter and emptying the rectum by enema, in the interval between the pains, I passed two fingers of my right hand over the vertex as far as they could reach, and applied the left hand externally over the occiput as it lay in the left inguinal region. I felt I had complete control over the head, using gentle pressure externally with the left hand, aided by the two fingers of the right on the vertex internally. This served a double purpose; first, that of tractor, and second, as a director, preventing any contusion of soft parts. I was then enabled to push down the vertex with very little difficulty into the right oblique diameter of the pelvis, thus changing the most unfavorable facial position into the most favorable cranial one."

As here stated, it will be seen that it is a case of face-presentation, converted into a vertex one, by means as impossible as they are absurd; or, according to the reporter himself (P. J. Creman), the case was a "face-presentation, and in the most unfavorable position—first mento-posterior," meaning, we suppose, according to modern nomenclature, the R. M. P.

I beg to disagree with Dr. Creman, and in support of my opinion will state that it is only necessary to refresh one's memory concerning the anatomy of the pelvis, and the possibilities and impossibilities of normal and artificial labors. "I passed," says he, "two fingers of my right hand over the vertex as far as they could reach, and applied the left hand externally over the occiput as it lay in the left inguinal region," and by this simple and easy procedure converted a "most unfavorable face-presentation" into a L. O. A. one. Here in particular do I differ with the author, for no accoucheur possesses two fingers (presumably the index and middle) long enough to reach from the vulva to the superior strait, and upward over the vertex, which was at least four or four and a half inches above the brim ("the presenting part had not yet entered the brim" is his own statement). Every experienced accoucheur knows how difficult it is, even in ordinary cases, to reach the promontory of the sacrum, with the tip of the longest finger, for the purpose of measurement. Moreover, the lateral depth of the pelvis could not be less than three and a half inches; and if we add to this depth again the four and a half inches of the fronto-occipital diameter of the child's head "which had not yet entered the brim," we can see where Dr. Creman has erred in stating that he placed his finger over the vertex, not yet having entered the superior strait. D. C. DAVIS.

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MEDICINE AND SURGERY.

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RELIEF FOR SPAIN.

An individual styling himself "The Indian Doctor" holding forth at Belleville, Ills., has sent to the America legation at Madrid a cholera mixture of his own make-up warranted to extinguish the epidemic. The "Indian" is in reality an illiterate German who saw the first red man recently at Buffalo Bill's Wild West. By investing $13.50 express charges (so stated in a daily paper) he has secured for himself the renown of being the prospective benefactor of plague-stricken Spain.

It is to be regretted that the "Indian" did not, in his laudable zeal to relieve suffering humanity, carry his generosity a step further by investing a few more dollars and accompany his package in propria persona to the infected country. Kind providence might have furnished him the means of proving to the skeptics the efficacy of his medicines on his own person. As it is, we fear that neither the American legation nor anybody else at Madrid will appreciate the disinterestedness of the "Indian" at Belleville, and that his mixtures will, shortly after their arrival, freely mingle with the turbulent waters of the Manzanares.

THE MEDICAL DEPARTMENT OF THE CHICAGO MEDICAL LIBRARY.

The Library Committee of the Chicago Medical Society is co-operating with the city officials in commencing a medical department in the Chicago Public Library.

Seven hundred volumes have already been added.

It is desired to obtain back numbers of the transactions of the American Association, the Illinois State Medical Society and other similar organizations. All physicians who can donate one or more volumes of such transactions for the public benefit are earnestly requested to send them to Edmund Andrews, M. D., LL. D., Chairman Committee on Library, or to notify him where they may be sent for.

FEVERS IN MINNESOTA.

In a paper on "Types and Phases of Fevers in Minnesota," read before the Hennepin County Medical Society, August 3, 1885, by Dr. Slagle, of Minneapolis, the following summary of conclusions arrived at were generally accepted by the members present.

1. We do not find here genuine "bilious remittent" fever.

2. That what has generally been called here either "bilious remittent" or "gastric remittent" is not probably an essential or idiopathic fever at all, but rather a symptomatic or sympathetic fever.

3. That we do occasionally find here what (with a proper understanding of the term) may be conveniently called a "typho-malarial" fever, which, although not a distinct variety fever,combines the causative elements of malarial and typhoid fever.

4. That we find here only one truly typical idiopathic (or essential) fever and that is typhoid; either as prevailing in its pure or complicated forms (exanthematic excepted.) Therefore be it

Resolved, that we find no types or phases of fevers which are peculiar to Minnesota.

THE PROCESS OF FATIGUE AND RECOVERY. —A most valuable addition to our knowledge of the life processes is offered in Augustus

Waller's Report on Experiments and Observations relating to the process of fatigue and recovery. Doctor Waller is Research Scholar to the British Medical Association, and his paper is printed in the issue of July 25 of the Journal. The paper is elaborated by diagrams and drawings, and merits the close study of those interested in physiological pathology. For the information of our readers we quote the editorial expression in the Journal, as follows:

"Dr. Waller's research on the 'Process of Fatigue and Recovery,' constitutes the report of his work during the past year in the investigation undertaken by him as holding a research-scholarship of the Scientific Grants Committee of the British Medical Association. The paper is, in substance, a summary and preliminary account of facts and data relating to some of the many questions in this department that require experimental answer, and contains results that are a distinct addition to our definite, as distinguished from our conjectural, knowledge.

The conclusions reached by Dr. Waller concerning the part played by the motor end-plates in the process of fatigue, and in the allied process of degeneration, are of special interest and importance, and justify our acceptance of the generalization that the junction of nerve and muscle is a weak link in the chain, and is the first to suffer in its transmitting function by poison, by excessive action, and by disorderly nutrition. We have, in short, under these last two conditions, an effect precisely similar to that which is brought about by the action of curare; and we see that an identical result—namely the establishment of a block between nerve and muscle—can be produced by curare, by fatigue, and by degeneration; that is to say, by agents in the toxicological, in the physiological, and in the pathological domains; a generalization which is still further extended to include the changes which naturally occur at death. Dr. Waller's experiments on this last point are not advanced as being entirely conclusive. The problem here is to examine whether, in the dying organism, the excitability of nerve outlasts the excitability of muscle by stimuli applied to its nerve; and the only method by which this could be accomplished was by the observation of the "negative variation" as the index of excitation occurring in the nerve when it had ceased to have action on the muscle. This method was followed, and instruments were devised for the purpose of recording the results. A complication, however, arises, owing to the development of electrotonic currents which might mask or be mistaken for the negative variation; and Dr. Waller promises to repeat these experiments with additional precautions. These experiments, relating to the motor end-plate, also go far to prove that it is an organ that can be fatigued; and, therefore, when called into action, a force-producing organ, and not merely a passive conductor, like nerve, as was held by Tschiriew. The last named observer stated that fatigue by excitation of nerve runs a parallel course with fatigue by direct excitation. The present report contains, however, curves (Fig. 19), in which the fatigue-decline is more rapid for indirect than direct excitation.

Another question of practical importance, which is broached in these experiments, is that of the principal site of fatigue, when normal voluntary action is sustained or repeated for long periods. It clearly results from the experiments made by Dr. Waller on this point, that, when central nerve-cell, nerve-fibre, and muscles are together called into play in the accomplishment of repeated voluntary efforts, it is the central cell that is the weakest link in the chain; and that voluntary action grows weaker as fatigue increases—not because either muscle or nerve are becoming exhausted, but because the central motor is expending its power. Dynamometric observations show diminished voluntary power at a time when the excitation of nerve or muscle gives none of the ordinary signs of fatigue at the periphery; evidence of peripheral fatigue appears, indeed, to be obtainable with a difficulty which contrasts strongly with the ease and rapidity of the occurrence of voluntary fatigue. The bear-

ing of these observations upon some of our guiding notions in medical practice is obvious, and appears at first sight to be out of harmony with the recent experiments of Zabludowski and others, and the undoubtedly good effects of "massage," which can only be understood on the supposition that fatigue is, in part, peripheral. This is, however, not excluded by the above observations; an instance of peripheral fatigue by excessive central action is given in the case of strychnia acting on the spinal cord; and the conclusion appears to be that the process of fatigue expresses itself at both ends of the nerve—more, however, at its central than at its peripheral end. Data are still wanting, however, before we may assign to each constituent of the nervous arc its share in the depression of function that results from expended activity. We know already, from the older experiments of Du Bois Reymond, and the more recent experiments of Wedenskii and of Bowditch, that the nerve proper has little or no share in the depression; that it does not expend force, but is merely a passive conductor; that it is, therefore, practically unsusceptible of fatigue. Bernstein's older experiments on the course of fatigue and recovery in nerve have been entirely supplanted by these modern experiments; and we now require a comparison of the process in the nerve-centre with that at the periphery, and not the comparison of muscle with nerve in this respect, seeing that the last-named organ is practically independent of functional fatigue and recovery.

Dr. Waller's report contains further an account of experiments showing that the effect of a poison, when it has added itself to the normal effect of which an organ is capable in reponse to excitation can itself be dissipated in consequence of a series of excitations and reaccumulated during an interval of respose, even if the organ be completely isolated from any fresh supply of the poison. Such phenomena are shown to occur in the case of the action of veratria upon muscle, and in that of strychnia upon the spinal cord; the veratria character disappears from muscle in consequence of repeated action, and returns during subsequent repose; the strychnia character disappears from the spinal cord in consequence of repeated action, and returns during repose. The analogy of these phenomena with each other and with the normal process of fatigue and recovery is complete; they differ only in rapidity with which they are developed. The process in the cord is evidently of the same causation as the changes in excitability recently observed by Walton upon animals poisoned by strychnia, to the effect that the cord, after repeated excitation, regains its property of summating stimuli, and loses this property during subsequent repose.

The course of an intoxication has many points of resemblance with the course of fatigue; both are usually characterized by an initial increase and subsequent decline of excitability; but the case of the action of strychnia upon the cord appears to be exceptional; the excitability is increased, even in advanced intoxication, in the presence of signs of muscular exhaustion. Under such conditions, however, a sign of fatigue is present in the form of the well known delay of reflex action, which increases as the toxic effects deepen, and is an index of a gradually increasing block of transmission in the cord. Dr. Waller reports experiments made in order to test the point of the nervous arc at which this block of transmission occurs, and has found that it does so at first exclusively, and later chiefly, at the junction of the afferent nerve with the spinal cord, for at first the time of reaction is prolonged in the absence of any retardation in the transmission of nervous impulses within the cord; and later, when such retardation does take place, it is small in comparison with the prolongation of the time of reaction.

The report concludes with some important observations upon the alteration of resistance which is caused in the human body during the passage of the galvanic current. But it is not our intention, nor have we attempted to summarize the entire report, which is itself a concise summary of observations, and a pref-

ace to further study of an important borderland province between physiology and pathology.

Acid Remedies and their Relation to Dyspepsia.—Professor Riegel, in the Archiv fur Klinische Medicin December, 1884, (Philadelphia Medical Times), contributes a very long article on the Pathology and Diagnosis of Diseases of the Stomach. He concludes that a small mixture of organic acid produces no injurious influence upon digestion, but that a greater quantity of this organic acid, as well as muriatic acid, will in a high degree impair digestion. On this account the disadvantageous influences of sour fermentation in many forms of dyspepsia may be attributed to the presence of too rich a mixture of acid, especially lactic and butyric acids. The favorable operation of an alkaline remedy in a case of the abnormal formation of acid can therefore be readily accounted for. On the other hand, his experiments demonstrate that the exhibition of muriatic acid, which has become so popular of late in the various forms of dyspepsia, is not justifiable or even safe. Too much acid in the treatment of diseases of the stomach is as undesirable as too little. Muriatic acid can be useful only in those cases where a lack of the required quantity of acid is evident.

Tea and Coffee Consumption.—The American Grocer of August 6, contains an article which brings to light some curious facts regarding the relative consumption of tea and coffee, showing how the latter has increased, while that of the former has declined. In the United Kingdom tea grows in favor while coffee loses ground.

"The detailed yearly statement from the Bureau of Statistics enables us to study from official data the consumption of tea and coffee.

During the past four years of depression and liquidation the country has steadily increased its per capita consumption of coffee, while that of tea has steadily declined.

The imports of coffee for the year ended June 30 were the largest on record. Those of tea exceed the previous year about five million pounds, and with that exception are lighter than for any year since 1879. The tables below exhibit the gross imports of both articles, exports of the same, the difference between the two being considered consumption.

TEA.

Year ended June 30.	Imports. Lbs.	Exports. Lbs.	Consumption Lbs.	Per Capita Lbs.
1881	72,103,356	2,713,139	79,130,849	1.16
1882	67,665,910	1,578,000	77,191,060	1.20
1883	73,479,164	3,881,219	69,597,945	1.28
1884	78,769,060	7,603,966	60,061,944	1.46
1885	81,843,988	5,730,591	66,372,765	1.54

The population is based upon bureau estimates, except for 1885, we estimating it at 57,000,000. We believe this reduction in the popularity of tea as a beverage largely due to the average quality of the leaf being below what it should be to captivate the palate. It has always been a mystery why the people cling so tenaciously to the harsh flavored Japan in preference to the delicate and deliciously aromatic teas of China, or some blend with the rich and full flavored product of India.

COFFEE.

Year ended June 30.	Imports. Lbs.	Exports. Lbs.	Consumption. Lbs.	Per Capita. Lbs.
1885	572,599,552	33,335,146	539,264,406	9.46
1884	534,785,542	26,152,679	508,632,863	9.08
1883	515,878,515	37,376,390	478,502,125	8.83
1882	459,922,768	24,343,479	435,579,289	8.25
1881	455,189,534	31,913,062	423,276,472	8.23

Here is a gain of 1.23 lbs. per capita in the consumption. Why is it? Because the coffee trade has taken pains to secure the distribution of the bean in a roasted rather than a green state, and this added to the competition of rival dealers and the portable coffee mill has resulted in enabling consumers to make a more uniform infusion than when the beans were roasted at home in skillet or frying pan. In the South, where five years ago scarcely any roasted coffee was sold, it is fast displacing the raw bean.

In the United Kingdom, where China and India teas are consumed and no Japan of account, and where adulterated coffee is the rule, we find that the per capita consumption of

tea has increased, while that of coffee is about stationary, as the following table exhibits:

	Tea. Lbs.	Per Capita.	Coffee. Lbs.	Per Capita.
1884	175,097,983	4.82	33,016,256	0.91
1883	170,812,697	4.74	32,448,080	0.90
1882	165,079,881	4.62	31,962,560	0.89
1881	160,225,789	4.54	31,943,408	0.90
1880	158,570,334	4.66	32,569,824	0.96

The Times in a leading article on the report of the Inland Revenue Commissioners, says: "The consumption of tea, it is true, continues to increase, which is a sign that the mass of the people were better off in 1884 than some people would have us believe."

Statistics are looked upon as dry reading, but we think the above tables are very suggestive and mighty interesting to every merchant handling the articles and in love with their business. We can see no good reason why the same determined effort on the part of dealers in tea to improve flavor and raise the standard should not result in a gain in consumption quite as pronounced as that in the world's most famous berry.

In referring to this matter, James Cook & Co., of London, in March last said: "If we had some clear-sighted men in our coffee trade, such as you have, the consumption could be pushed very much; but we expect cheapness has much to do with it. Tea here is relatively cheaper than coffee with you, and probably one pound would make seven or eight gallons of an infusion such as the working classes would be satisfied with." Taking the economical view of the question, we must then conclude that the resources of the working classes here are far greater than in the United Kingdom, whereby they are enabled to become free consumers of coffee. But we must not forget that beer costs consumers in Victoria's realm far more than coffee costs consumers in the United States; and that is one reason why the moral tone of our laboring classes is so far above that of those living in the United Kingdom."

Dr. Van Ermengen on Dr. Ferran's Inoculations.—As supplementary to the report of the French Commission we offer what the Berlin Correspondent of the British Medical Journal reports:

"In a letter to the editor of the Deutsche Medicinische Wochenschrift, on the results of his inquiry into Dr. Ferran's mode of inoculation for cholera, Dr. Van Ermengen states that the fruits of his mission have not come up to his expectations. 'Many a cloud' he says, 'that hovered over these much talked of inoculations could not be cleared away.' He had no doubt that the disease was cholera of the most virulent kind. 'We have questioned and examined about 300 persons who were inoculated and reinoculated. The phenomena that were observed, after inoculation with Ferran's liquid, can be summed up as follows. About five hours after injection on the external surface of the upper part of the arm, an œdematous, rather painful ulcer, that did not spread much, was seen; this disappeared in from twelve to twenty-four hours, without leaving any traces behind it. At the same time, symptoms of fever, discomfort, shivering, and a kind of heaviness, were perceived, which soon disappeared, and were always proportional to the local inflammatory action. In rare cases (about two or three) two or three liquid stools, without any specific character, were observed. There were no painful, lasting cramps, but sometimes transitory contractions. Not one of the individuals observed showed symptoms in the least suggestive of algidity.

Six specimens of the blood, taken twelve hours after inoculation, from the top of the first finger, were normal, and contained neither mircrococci nor bacteria. Even up to the seat of the edema, a centimetre from the periphery, it had the same appearance as normal blood. In plate-cultivations in nutritive gelatine, there was no developement of micro-organisms. We could not examine the liquid stools offered by one of the inoculated. The individuals subjected to reinoculation presented the same local symptoms.

I must add, that we did not observe that the slightest precautions were taken to prevent the access of particles from the air to the fluid used for inoculation. The fluid was

collected in an unsterilized cup, protected against particles from the air only by an ordinary piece of paper. Even the syringes were only sterilized, as it was called, by having a little boiling water drawn through them. Dr. Ferran neglects all the precautions that are observed in the laboratory in inoculations 'in corpore vili.' We should not, therefore, have been surprised if we had seen symptoms of septicemia as consequences of the inoculations, confirmatory of the facts lately communicated to the British Medical Journal (June 6th, p. 1170, as reported by the Madrid correspondent). I must, however, state that we did not see a single case of abscess as a consequence of the inoculation.

Alcira was the place first attacked by the epidemic. The influence of the water here on the spread of the epidemic seems incontestable. As soon as the inhabitants drank water from a source at some distance from the town, the epidemic decreased considerably in severity. The statistics of the mortality of Alcira show with sufficient clearness that they were made to prove the efficacy of Ferran's inoculation. We have been unable to receive one single detailed account of the social position of those inoculated and those not inoculated, their age and sex, and of the time when the inoculations took place. It seems certain that the inhabitants belonging to the well-to-do classes have been inoculated in large numbers, and for about a month. In Algemesi, Alberique, etc., the statistics are still less demonstrative.

The more difficult part of my task of investigation was as follows. We were obliged first to convince ourselves of the presence of comma bacilli in Ferran's fluid-cultivations. The bacilli were rather scanty, and there were none of the forms of development that Ferran pretends to have discovered. We saw that the cultivation-liquid of Ferran was not very favorable to the development of the cholera-microbes, and that it speedily perished in it.

Dr. Ferran afterwards took great trouble to let us see those foreign forms of the development-cycle in older cultivations, which he has discovered. He showed us, in bouillon that was fourteen days' old, and much changed in appearance, voluminous bodies of mulberry-leaf shape—five, even ten times the size of a blood-corpuscle—which he supposed to originate directly from endogenous spores of the comma-bacillus! Other rounded off, but less voluminous, corpuscles, which were found in the same liquid, corresponded, according to Ferran's view, with free spores that had not developed so much. It is superfluous to say that these things are to be ascribed to impurities of quite a different origin.

I was very much surprised to see that Dr. Ferran is far from utilizing the perfected methods of bacterioscopic technics for the very delicate morphological investigations with which he is occupied; and everybody will be astonished, as I was, to hear that he has no object-glass with homogeneous immersion and Abbe's condenser, and that he omits to color the bacteria that he studies. His methods of cultivition, as far as I am acquainted with them, are also not above criticism.

We placed a series of written questions before Dr. Ferran, the solution of which seemed to us to be indispensable before proceeding experimentally with the procedure adopted by Ferran in producing his liquid.

To our great regret, Dr. Ferran declined to answer these questions. He sent us word that the moment did not seem to him to have arrived for publishing what he calls his 'secret.'

We proposed, then, that Dr. Ferran should provide us with a sufficient quantity of fluid for inoculation, with which we could make comparative experiments on ourselves and on animals. We promised to undertake, in writing, not to publish any account of our experiments, if we should discover anything new, until he should empower us to do so. All to no purpose!

The experiments that we were prevented from making in Valencia are now being made in the laboratory of the Museum for Comparative Pathology at Paris, and I shall perhaps give an account of them later on."

Parthenine—A New Remedy.—The Therapeutic Gazette reports that Dr. Jose Ramirez Tovar gives, in La Cronica Medico-Quirurgica, of Havana, the results of his experiments with parthenine, an alkaloid derived from parthenium histerophorus. One of the first cases was a strong and vigorous woman of 34 years, who suffered from an insupportable facial neuralgia, which became worse at a certain hour every day. One gramme of parthenine was ordered, divided into ten papers, one to be taken every hour. She began to feel relief after taking three of the papers, and the next day passed without experiencing the usual exacerbation. Small doses were recommended afterwards to sustain action of the first doses. She disregarded the advice, and, as a result, she returned on the fifth day again complaining of the neuralgia, but this time not so severe as before. A few more doses of the parthenine cured the affliction, for she had no attack during the succeeding five months. Two cases of intermittent fever were also successfully treated with parthenine. A little child who had suffered for seventeen days irregularly from fever, drowsiness and anorexia, and who had derived no benefit from quinine, showed marked improvement in twenty-four hours after using parthenine, and in three days the temperature was normal. The results in all of Dr. Tovar's cases have been so striking that he feels confident that parthenine, if it come into general use, will not disappoint the hopes that have been built upon it.

The Treatment of Chorea.—In a clinical lecture on the treatment of chorea recently published in the Progès Médical (London Medical Times) M. Joffroy strongly advocates the use of hydrate of chloral. His first experience of it was not satisfactory; he treated two children suffering from severe chorea with large and repeated doses for four or five days, keeping them in a deep sleep during nearly the whole time, but without any material benefit. He then took to giving it methodically three times a day, in regular doses, and considers that he has obtained excellent results by this method. For children over ten, the daily dose should be sixty grains; for those under that age this should not exceed forty-five grains. Seeing that he speaks of having continued the drug sometimes even for two months, and that he admits that in the severest cases the drug has proved of no service, it is evident that even in his hands chloral has not shown itself to be of more service than the thousand and one drugs which have already been recommended for this disease. In the severest cases M. Joffroy has found wet packing of great service.

Resection of the Ankle.—The Cincinnati Lancet and Clinic finds the following in the London Medical Record: In the Bulletin de l'Académie Royale de Médecine de Bélgique, tome xviii., No. 12, Dr. P. Liebrecht, of Liége, describes an operative procedure which he has recently devised for resection of the tibio-tarsal articulation in cases of fungous arthritis. The methods that have hitherto been practiced are all, he states, attended with much labor, in consequence of the difficulty in exposing and dividing the numerous ligaments of the ankle, and are apt to cause injury to the tendons, vessels and nerves around the joint.

The following is a description of the author's method, which, however, has up to the present time been performed only on the cadaver.

The skin incision is made from the middle of the posterior border of one malleolus to the middle of that of the opposite malleolus. The tendo Achillis is divided on a director. A second division, perpendicular to the first, is now made along the inner border of the tendo Achillis. This is almost two and one-half inches in length, and, passing downward, almost reaches the inner tuberosity of the calcaneum. The soft structures between the tendon and the bone are now dissected away, so as to expose the capsule of the joint and the posterior peroneo-astragaloid ligament. On excision of these ligaments, the astragalus and the lower portion of the tibia are exposed to view, and also the line of articula-

tion between these bones, and below this the astragalo-calcanean line. The tendon of the flexor longus pollicis is then displaced from the posterior surface of the tibia, and all the tendons, vessels and nerves situated behind the two malleoli can now be easily pushed forwards, so as to expose the whole of the posterior aspect of the joint. If the bones be hard, as is mostly the case in the cadaver, the posterior surface of the astragalus, at one of its borders near a malleolus, should be attacked first with mallet and chisel. A notch should first be made along the whole width of the bone, so that by subsequent action of the chisel the upper portion of the astragalus may be removed in one piece. If necessary, one or more slices of bone may be afterwards removed.

The end of the tibia, if diseased, may be excised in a similar manner. If the diseased bone be very soft it may be scooped away. The articular surfaces of the malleoli having been exposed, they may be scraped or removed with the chisel. The lateral ligaments may now be divided with a blunt. pointed bistoury. If any fragments of the astragalus remain adhering to the capsule or ligaments they should be torn away with the forceps.

A large cavity is thus formed, at the bottom of which is found the articular capsule of the front of the foot, which may be readily scraped, or, if necessary, excised with scissors.

If the loss of bone be not very great, and particularly if the malleoli have been partially preserved, the cavity may be left to become filled up by granulations, and then after recovery the patient will have a foot that is almost normal.

When it has been found necessary to remove much bone, the opposed osseous surfaces of the leg and tarsus should be fixed together as as to obtain osseous ankylosis.

Finally, the divided extremities of the tendo Achillis and edges of the external wound should be brought together by sutures.

Dr. Liebrecht claims for this operation the following advantages: "It does not cause any serious primary lesion, or necessitate any useless sacrifice; the soft parts and the periosteum are not bruised in the course of the operation. It offers more chances than the other methods of preserving a limb of normal form, and better assures the integrity of its functions. It may be easily and quickly performed. Owing to the position of the wound, the discharge of secretion will be effected without any difficulty, and the process of repair will be carried on much more rapidly."

Piscidia Erythrina.—The New York Medical Journal writes: Legoy, to whose elaborate paper ("Bull. gen de therap.") we have before alluded, concludes that piscidia exerts a direct stimulant action upon the central nervous system, exciting principally the medullary centers. The increase in the number of the heart-beats is probably due to this action upon the gray matter, and the rapid respiration may be explained in the same manner. He recommends the drug as a valuable remedy in neuralgia, in doses of from 45 to 60 grains. The following are suggested as convenient formulæ:

℞ Fluid extract of piscidia, 5 drachms.
Syrup, 12 drachms.
Water, 12 drachms.

Dose one or two tablespoonfuls daily.

℞ Tincture of piscidia, 5fi drops.
Tr. of viburnum prunifolium, 50 drops.

For a single dose.

Sunstroke; or Thermic Fever.—The Medical Bulletin writes:

"No error can be fraught with more dangerous consequences than that of failing to discriminate between heat exhaustion and true sunstroke. The former is comparatively a mild affection, which does not differ in symptoms from any other form of acute exhaustion. It is characterized by dilated pupils, a cold, pale, and perspiring skin, a quick but feeble pulse, with great general prostration, and a tendency to syncope. Recovery ensues within twenty-four hours under rest and the administration of stimulants.

True sunstroke, or coup-de-soleil, is a far more terrible affection. It is characterized by contracted pupils, a hot, dry, and flushed skin, rapid, and forcible pulse, throbbing carotids, labored or stertorous breathing, with profound coma, or delirium and convulsions ending in coma. In the fulminant cases that have been observed, the unfortunate persons have dropped dead as if struck a mortal blow by an unseen hand. Contrary to the popular opinion, it is not necessary that the patient should have been exposed to the direct rays of the sun. For as was noticed by many distinguished observers, and practically demonstrated by Dr. H. C. Wood Jr. (Thermic Fever, or Sunstroke, by H. C. Wood, Jr., M. D., J. B. Lippencott & Co., Philadelphia, Boylston Prize Essay) in his experiments on animals, excessive heat and heat alone is the essential factor in this disease. Many of the worst cases have occurred at night, in houses, in tents, and in narrow defiles, where the sun never entered, but where the atmosphere was hot and stifling. It is, therefore, a true fever, and, as suggested by Dr. Wood, should be designated thermic fever, as expressive of its exciting cause.

The treatment, which must be instituted promptly, can be summed up in three words: Reduce the temperature. It is the extraordinary high temperature which is burning up the patient, and which, unless speedily reduced, will cause death by paralysis of the heart. He should therefore be at once removed to a shady place in the fresh air, his head slightly elevated, and his whole body, especially his head and chest kept deluged with ice-water. An ice-cap, in addition, should be applied to the back of his head, until his temperature and pulse have fallen. Aconite internally will also probably be found beneficial in controlling the circulation. Morphia, hypodermically, has been found to be of great value in cases characterized by restlessness and convulsions. If the attack has come on shortly after a meal there can be no doubt of the propriety of at once unloading the stomach by an emetic. If the patient is insensible, one-tenth grain apomorphia may be given hypodermatically. The Australian physicians produce emesis in these cases by the rectal injection of twenty grains of ipecac. They have always noticed an abatement of the symptoms as soon as vomiting began."

A New Phimosis Forceps.—The superiority of these forceps, invented by Dr. Waldo Briggs, of St. Louis, Mo., over others designed for the operation of circumcision consists in the simplicity and dexterity of the operation with them; the freedom from hemorrhage to a great extent, the exactness of the coaptation of the skin with the membrane when sutures are in, which will almost insure healing of the wound by the first intention.

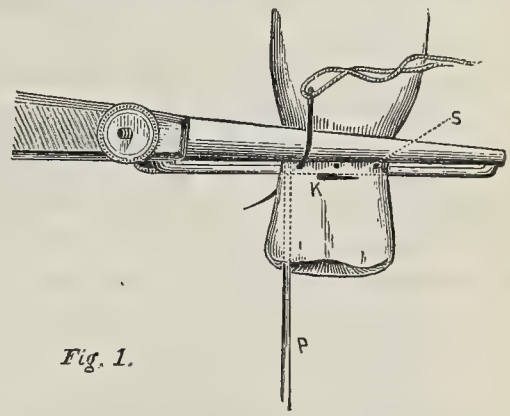

Fig. 1.

Figure 1—Represents the first step of the operation; the forceps in position showing probe within the prepuce laterally and needle passing to inner side so as to prevent making a suture through the skin only. Any number of sutures desired may be passed, but it is only necessary to have three, which on division of the loop makes six sutures, three on each sider.

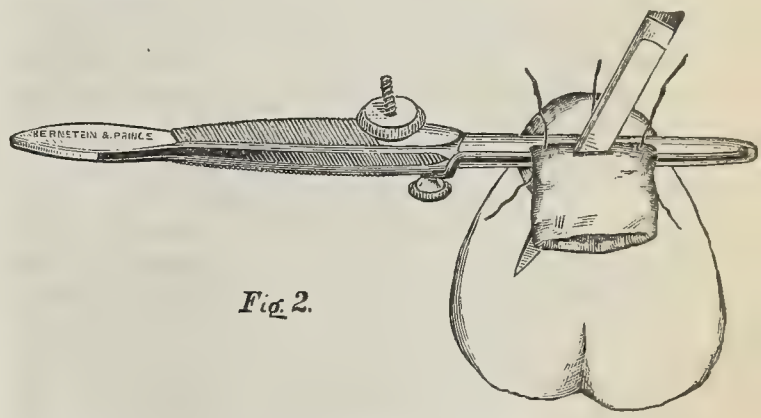

Fig. 2.

Figure 2—Shows sutures in position and foreskin transfixed above the guide or extra blade.

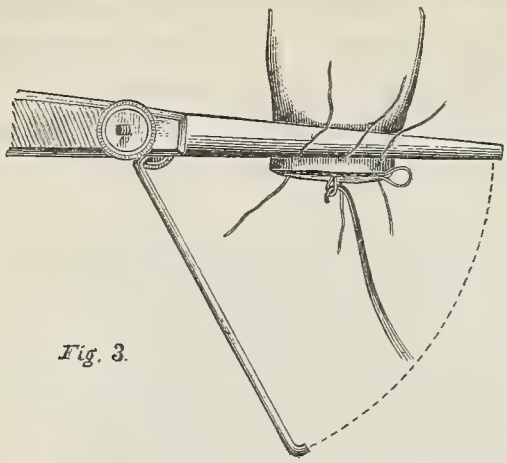

Fig. 3.

Figure 3—Represents the division of the foreskin, and hook (a probe or tenaculum may be used) drawing up the loop in the centre or between the membranes. These loops may now be divided and the sutures tied on each side. The forceps being held laterally obviates any constriction of the membrane in the majority of cases; but should there be any, it can be remedied by dividing the membrane on the dorsum between the sutures.

This instrument was made for him by Messrs. Hernstein & Prince, Surgical Instrument Manufacturers of this city.

CLINICAL LECTURE.

BY HENRY B. SANDS, M. D.,

Professor of Clinical Surgery, College of Physicians and Surgeons, New York.

Delivered at the College of Physicians and Surgeons, New York.

Case I.—A Case of Spondylitis.

This little girl, gentlemen, had diphtheria five months ago. Subsequent to the disease she had an abscess on the left side of the neck. This was followed by deformity of the neck and deformity of the spine. Previous to the diphtheria she was in active health. Now she has an undoubted torticollis. The position of the head is such as would be produced if it were a case of torticollis pure and simple, by contraction of the left sterno-mastoid muscle. The effect of the contraction of this muscle is to depress the head upon the left side and to turn the face toward the right side. If it is a case of torticollis the sterno-mastoid will be contracted on the side opposite to that to which the face is turned. Here the face is turned to the right. We should expect to find the muscle rigid under the skin upon the left side. She raises her head considerably and I find no prominence of the sterno-mastoid, as I would expect to find with this great distortion of the head to the right side. This excludes torticollis from the diagnosis. What else can cause such a deformity? We hear that the child had an abscess. If the abscess were deep-seated it is quite possible that following the abscess there may have been a contraction of the tissues so as to give rise to this position of the head. Such a contraction would be more liable to be fibrous in character, the result of cicatricial shortening or contraction. But it is possible that this is not a case of either torticollis proper or of cicatricial contraction, but of spondylitis—inflammation of the vertebræ. This is one of the very common causes of deformity of position of the head. There are two curvatures of the spine in this case, viz: There is a lateral curvature in the cervical region, the convexity being to the right side. In the dorsal region there is a curvature, the convexity being to the left side. In the dorsal region we have a normal lateral curvature whose convexity as a rule is to the right side. Here it is the opposite. The lateral curve in the dorsal region seems to be compensatory to the cervical curve. Besides the curve in the cervical region we observe thickening of the skin over the spine. If it were simply a curvature we would expect to find the spinous processes more distinctly felt under the fingers. We make pressure on the swollen part and ascertain whether that occasions pain. We cause the spinal bones to press upon one another by crowding the head downwards. When I press upon the tumor gently there is a good deal of pain. This is a very marked case of disease of the vertebræ. There is no evidence of paralysis, but when the child walks she carries her head in hand to keep it steady. This is quite characteristic of disease of the spine as distinguished from torticollis or cicatricial contraction.

Another method of examination is that of the anterior surface of the vertebral column, where it is covered simply by the pharyngeal wall. You can inspect the spinal column and see the bones as covered by the mucous membrane of the pharynx, and you can feel the anterior surface of the bodies of the vertebræ, from the second to the fifth, quite distinctly. You might find a swelling of the surface or fluctuation, if there was abscess or tenderness.

Assuming it to be a case of inflammation of the vertebræ or Pott's disease, this becomes

a case for mechanical treatment. A properly constructed brace taking its point of fixation around the body, and having a rod running up to the middle of the back, attached to the hips and chin, so arranged as to allow the force to play upon the displaced parts would be of great benefit. If this is a case of spondylitis it is proper to put the child under ether, and attempt a reduction of the displaced parts. Gradually applied pressure will bring the parts in correct position in the course of a few months or a year.

The apparatus is applied not only to correct the deformity, but also with the object to prevent pressure of parts above the disease upon those parts which are affected.

Case II. Lymphoma of the Neck.

Female, æt. 52. Menstruation ceased nine years ago. Patient has a tumor on the right side of the neck. We get some idea of the nature of the tumor by observing its situation. This tumor might be called a parotid tumor, but it does not lie high enough. If it were a tumor of the parotid gland it would rest here and extend up to the sigmoid notch. It lies in the course of the sterno-mastoid muscle. It is in the situation where we have lymphatic glands. We have the presumption of the tumor having taken origin in one of these glands. Moreover, the shape of the tumor corroborates the diagnosis. We find, on examination, that it lies underneath the sterno-mastoid muscle. The muscle passes over the tumor as a strap would pass over it. On palpation I can raise the skin and muscle and find the tumor left underneath. If it is a tumor of the lymphatic glands, it is a tumor of the deep chain of lymphatics. I am doubtful whether the tumor is firmly adherent to the sheath of the vessels. I believe this tumor to have originated in the lymphatic glands. Whether it is a simple lymphoma or a lympho-sarcoma I cannot say. I would be determined in my opinion before the time of the operation, by the rate of growth of the tumor. If a simple lymphoma it may remain as it is, or grow very slowly and not affect the woman's health or appearance. In that case, I should wait and let it alone. If I knew it to be a lymphosarcoma or melanosarcoma (pigmented) I would advise her to subject herself to the risk of an operation and have the tumor removed immediately. Inasmuch as I am not certain, and inasmuch as the operation involves some risk, I hesitate somewhat to give this advice. I should be willing to watch this tumor for a week or so, with the hope that it might not change in character, or that it might diminish in size. But I am suspicious that it is a tumor of malignant character.

Operations for malignant tumors which are deepseated in the neck are very often failures. The disease is liable very rapidly to recur in spite of the best performed operation. Only now and then we succeed in so thoroughly performing extirpation as to give the patient a fair chance of recompense for the risks which are incurred.

Case III. Ganglion of the Wrist.

Male. Has a swelling in the neighborhood of the wrist. Just above the wrist joint there is a prominent swelling on the dorsal aspect of the forearm about the size of an almond. On the palmar surface there is also swelling of great extent, but less prominent. The swelling is along the line of the flexor tendons. This swelling has existed for nearly three years. The hand is very feeble. The muscles contract with very little force. I suppose that the muscles are not diseased. If the swelling is fluid, serous, or contains rice-like bodies, we should suspect an enlargement of the bursa. If it is solid, we should suspect the presence of some new growth which is malignant. The disease has existed three years without making great progress. I cannot recall a case of bursal tumor on the palmar surface which has not extended down the palm. Here the tumor lies quite above the level of the wrist joint, and the palm is entirely free. I should propose to explore the tumor and ascertain the cause. If cystic, an incision should be made, as in the case of bursal tumors, with antiseptic precautions. If a solid tumor, the case is one of great gravity; nothing can be done short of causing loss of motion of the arm. I try to move the tumor upon the bones and I do not succeed. This does not prove that the tumor is developed from the bones. It may be that this is simply a distended sac. It was opened a month ago with a needle and no fluid came out. If there were a history of syphilis this might be a gummatous swelling.

SELECTION.

NOTES FROM THE HISTORY OF MEDICINE AND OF MEDICAL OPINION.

BY SURGEON-GENERAL CHAS. A. GORDON, M.D., C.B.

Taken from the New York Medical Abstract.

In ancient Egypt, Isis (the emblem of the moon) was believed to have bequeathed her

medical potency to her son Orus (the emblem of the sun). From a comparison of dates, it would appear that anatomy had been studied even before practical medicine—that is, the "healing art" became established as such. Thus, according to Manetho, the study of anatomy was assigned to a son of Menes, and consequently to a date 2717 or 2412 B. C., the actual recognition of the art of medicine being, according to other authors, due to Sesostris, otherwise Rameses II, about B. C. 1245. A considerable period previous to the latter date, however, the art of healing had evidently attained to a recognized position, for according to a work on medicine dated in the time of the 18th dynasty—that is, about B. C. 1400, and known as the "Papyrus Ebers," there is evidence that a knowledge of the treatment of disease was nearly in as advanced a state as it had attained long subsequently, namely, in the days of Galen, in the second century of our era. The ancient Egyptians were also the first apothecaries, and chemistry itself takes its name from the land of Kham (Khemi=Egypt). There were then in existence primitive, and indeed sacred, books containing prescriptions and remedies. Some of the Hieratic numerals, also, exhibit a considerable similarity to the kind of notation, especially to those in use as signs for drachms and scruples, in prescriptions of the present day. Prescriptions were in those distant periods made out in the same form as are those of our modern physicians. The medicines used were of four kinds—namely, draughts, blisters, powders and clysters; minerals as well as vegetables were used in their composition, iron and squills being two of the most celebrated of the drugs made use of. It is very interesting to observe that to the army were attached physicians and surgeons, although all that yet appears in regard to those functionaries is that they were prohibited from accepting payment or other rewards from their military patients. Similarly, physicians whose duties lay with the general public were maintained and paid by the State (Diodorus Siculus).

At a later period, namely, from the fourth to the first century B. C., medicine in Egypt appears to have degenerated, the cause of that degeneration the circumstance that "research" and "experiment" had a short time previously been put a stop to by the very summary enactment that new medicines and new methods of treatment were, if adopted by the medical attendant, to be so at his own personal risk, and that in the event of the patient dying while under this species of "scientific" treatment, he should himself be put to death. Then it was apparently that the practice of medicine fell chiefly into the hands of the priesthood. Particular diseases were assigned to the malevolent action of particular spirits or demons, according to the nature of the illness, or the part of the body affected. No fewer than thirty-six such spirits presided over the different parts of the body and its functions, so that considerable diagnostic power on the part of the prescribing priest was doubtless necessary, in order to identify the precise spirit to which the disease in a given case was due, after which followed ministrations to the particular "spirit" concerned, and with them, no doubt, careful attention to the patient (Benson, Sayce, Fonblanque).

And have not the above phases of medical opinion in the far distant past their counterparts even in the present time? Are not the terms "lunatic, moon-blindness, sunstroke, etc.," modern representatives of the power accorded to Isis and to Orus in ancient Egypt? Nay, while these notes are being prepared an elaborate account appears of the wonderful effects of the "sun cure" in restoring the health of those who suffer from what? Over-civilization! Recently published articles have gravely discussed the relation which is believed to exist between the occurrence of pestilences and planetary influences. With regard to the power "spirits" of diseases believed in by the old Egyptians, have we not, very closely at least, their representatives in the "superstitions" of the present day? The Latin Church has either a saint, or a relic, or a charm for almost every disease; St Apollonia and St. Barbara for toothache; St. Avertin against lunacy; St. Benedic for stone; St. Clara in sore eyes; St. Hubert in hydrophobia; St. John in epilepsy; St. Maur in gout; St. Pernel in agues; St. Geneviève in fevers; St. Sebastian in plague; St. Ottila in affections of the head generally; St. Blazius in those of the neck; St. Laurence and St. Erasmus in those of the body; St. Rochus and St. John in those of the legs and feet; St. Anthony for the removal of erysipelas, St. Anthony's fire; St. Martin for small-pox; St. Vitus for nervous disorders; St. Margaret was supplicated for children, and in parturient danger; and a long list of others may be found in Pettigrew's work on Superstition (p. 37), and in Brand's Popular Antiquities (see Meryon's History of Medicine, p. 105). It is not to be questioned that the incantations alluded to had also their good effects, that they imparted confidence to the sick, and that under this form of "expectant treatment" recoveries took place, for had they not, the practice alluded to would have spontaneously

ceased. And have we not the conditions thus indicated reproduced in the present day? In the above enumeration what do we remark? Do we not observe how easy it is to transpose, otherwise evolve out of, the idea of malevolent spirits causing disease, that other and opposite idea of beneficent spirits, namely, those of departed saints interfering to protect believers in their influence against the attacks of disease, or to effect the recovery of those afflicted with disease in any of its forms? As in modern times, so in those most ancient, there existed an unwillingness to accept the fact that disease and decay belong to and are inseparable from humanity; that in both respects our race is but subject to ordinary laws which affect all organic nature. There has ever existed also a readiness to look upon disease itself rather as an actual entity than as a mere condition, that entity coming into the body from without, rather than pertaining to itself. But there is this difference between the methods of "cure" adopted in the distant ages referred to and those indicated by modern science. In the past the spirits causative and curative were appealed to and propitiated; modern "knowledge" leads its votaries confidently to anticipate that "like a torpedo, a molecular mechanism may be introduced" into the human system, " so as to explode in some particular group of living elements," and thence expel as if by a process of bombardment the particular disease, which like an enemy had obtained temporary posession of the part affected, and held it as if it were a citadel. Further, is it not the case that hope and confidence are the most powerful aids to recovery that the patient can still be buoyed up by? But the object of hope and of confidence on the part of the modern patient is different from that of the ancient Egyptian. According to Egyptian philosophy, "Kheper, the scarabeus with sun's disk, was the creative principle of life, which implanted in matter the seeds, or germs of life" (Sayce, p. 72). Thus early then have we the "germs" of a theory which, variously modified according to times and conditions of thought, has dominated men's minds even down to the present day. But now, "germs" have so far changed in character as no longer to pertain to the development of life, their mission for the time being has come to be to produce diseases by which life is destroyed. In other respects the Egyptian myth is accepted, its votaries far more numerous than when it was originally promulgated, generations before the days of the Pharaohs.

Some of the hieroglyphics represent the process of amputating a limb by the surgeons of ancient Egypt, the operation being very simply performed by chopping the member off by means of an instrument somewhat shaped like a modern cleaver. The circumstance that the operation in question was performed implies a knowledge on the part of those who performed it, of means effectual for the suppression of arterial hemorrhage.

In Egypt mummies have been found with teeth filled with gold, and in Quito a skeleton has been discovered with false teeth secured by means of a gold wire. In the museum at Naples, among some of the surgical instruments discovered at Pompeii, there is a facsimile of Sims' speculum. In the ruins of Nineveh, Layard found several magnifying glasses.

Medicine in ancient Egypt appears to have been more cultivated than surgery. In connection with this subject it may not be deemed inappropriate to refer to some allusions made in ancient works, sacred and profane, regarding the diseases which prevailed in Egypt, and the countries adjoining thereto. Thus, "Leprosy in the clothes and walls" most probably meant the inflorescence that shows itself, caused by the saline matters contained in the soil.

"Plague" is held to mean not only the disease properly so-called, but pestilence as a generic term. An important statement with regard to the range of temperature within which that disease, properly so-called, can only exist has been made, namely, not over 81° F., and not under 61° F. What do recent observations say in regard to this point?

"Boils and blains" in Egypt, what were they? Authorities are divided on the subject. By some they are thought to have been small-pox, there being much reason to believe that variola existed in Egypt in the time of Moses.

"Botch of Egypt." Elephantiasis with ulceration, "disjunctive amputation," evidently like the leprosy of India, called in Arabic "Jusain." "Blindness," as in ancient times, is still very prevalent, as a result of ophthalmia. "A consumption." The precise significance of the term uncertain, supposed to refer to the plague with bubos. "Emrods." Doubtless hemorrhoids. "Scab and itch." Porrigo and scabies. "Posession by the devil." Demonomania, madness, and epilepsy. The madness of Saul was melancholia, caused by reverse of fortune, soothed temporarily by the music of David on the harp. Disease of Job, about 1520 B. C., or according to Hales, 2130 B. C. By some writers is considered to have been small-pox. Disease of Nebuchad-

nezzar. Madness with specific hallucination, namely, that he was an ox. Disease of King Jehoram. Chronic dysentery. (Prolapsus ani?) "Epilepsy" is described in St. Luke, chap. ix., as existing with mania. Disease of Hezekiah. Supposed to have been fever terminating in abscess. Disease of Herod. Entozoa, or phthiriasis. Josephus thought the former; Mead agreed in this conjecture (Medica Sacra).

In ancient India the means of succoring the wounded and maimed, of alleviating pain and curing diseases were carefully cultivated, and the professors of the healing art held in high veneration. The Hindoo history of medicine proves that this was the case; for according to that history one of the fourteen ratnas or precious objects produced by their gods by the process of "churning the ocean" was a learned physician. Among the arts pertaining to healing, successfully practiced by physicians, so long ago as the time when the Aryan conquerors gained posession of upper Hindostan, was that of curing persons bitten by the several kinds of poisonous snakes which then, as now, inhabit that vast country—an art which has been distinctly accorded to them by Arrian at the period of Alexander's invasion (4th century, B. C.).

The Hindoo notions of physiology were peculiar. In one particular, however, they accorded with those of modern science, namely, that the human body was itself a microcosm. They divided it into different parts which correspond with those of the globe, namely, mountains, cold and hot situations, with the various oceans. Each of the fluids is influenced by one of the seven planets which regulate their condition. Living bodies are produced from vapor, vegetation, incubation and parturition, as insects, plants, birds, fishes, reptiles, and animals. Of the latter, man is the chief, and in proportion to the complicated structure of his body, so is his liability to disease. The human body is governed by an independent principle, or soul, which acts through the medium of the members, and is itself an emanation from the great soul of the world. As long as the soul remains in connection with the body, the diseases with which the latter is afflicted may be removed; and it is proper that during all this time remedies should be employed for the purpose. The combination of the soul and body gives rise to the different dispositions which are derived from Prikriti or Nature. The harmonious action of the five elements (ether, air, fire, water and earth) and their qualities constitutes health; the increase or diminution of one or more of the humors formed from the elements produces disease. Here, then, from a date in Indian history stretching back to several centuries before our era—how many it is not possible to say—but according to some chronologists, fourteen to eighteen, we have distinctly indicated the "humoral" doctrine which, in the eighteenth century, held sway in Great Britain—and, indeed, in Europe generally. Even then also there was in India, as there now is in our own country, "a class of physicians who rely most on diet and regimen and next on external applications, having a great distrust of the more powerful modes of treatment." The same class, at the date of Alexander, employed also charms, amulets, etc.

According to the sacred works of the Hindoos—"In the first age man remained prosperous, virtuous, happy, and free from disease. In the second age a third of mankind were reprobate; disease appeared, life was curtailed, and memory impaired. In the third age, half of the human race were depraved; and during the present age the corruption of mankind was such as to cause a still further curtailment of life, and to embitter it by numerous diseases."

The occurrence of sickness in the individual was held by the authors of the Veda to be proof of his guilt in his present or previous state of existence; a belief which led Brahmin priests, when afflicted with illness, to destroy themselves. A number of deities were believed to have a special knowledge of disease, but not until small-pox appeared at a very much later period was a goddess represented, namely Sitala. [There are oriental scholars, however, who are of opinion that small-pox was known in India, and a deity assigned to that disease at a period as early as B. C. 2547. When, lohg subsequently, inoculation was introduced, the purpose in view was the propitiation of that deity rather than the prevention of small-pox.] Particular gods and planets were believed to preside over different parts of the body and over particular qualities, as life, understanding, courage, and so on; thus, Surya, the sun (Orus) presided over sight; Chandra, the moon (Isis) over understanding. The two latter deities we, moreover, find reproduced in Hindoo mythology under the names respectively of Iswara and Isi, representing respectively the male and the female principles of Nature.

The oldest work on Hindoo medicine, namely the Ay'ur Veda, variously assigned to a date between B. C. 1400 and B. C. 1800, contains anatomical plates believed to have been taken from actual dissections; thus, as observed by Sir W. Jones, he found in that work "an entire upanishad (section) on the internal parts

of the human body with an enumeration of the nerves, veins and arteries; a description of the heart, spleen and liver, and various disquisitions on the formation and growth of the fœtus (Disc. xi.). According to the same distinguished oriental scholar the Vedas rank next in antiquity to the five books of Moses (Disc. ix.). In that period medicine was eagerly cultivated, and attained a high position, the system of the Hindoos; it was studied by the Arabians before that of the Greeks. With foreign subjugation, however, decadence began three centuries before our era. The Ay'ur Veda contains the following divisions of subjects, namely: 1. Surgery, including "the means of removing the dead child from its mother," of healing wounds inflicted by sharp instruments, of applying bandages and using surgical instruments. 2. A description and treatment of diseases affecting the parts above the clavicle. 3. Of diseases which affect the whole body. 4. Mental disorders. 5. The treatment of infants. 6. The administration of antidotes against poisons. 7. Therapeutics, including a study of "those medicines which cure diseases in general, and restore youth, beauty, and happiness." This division also embraced chemistry, or more properly alchemy, the object in view being to discover the universal medicine —the panacea that would render health permanent and life perpetual. [Wonderful, indeed, are the points of similarity between the views and pursuits of philosophers and men of science who flourished many centuries ago, and of those who charm and delight the world at the present day. But the panacea then sought for remains unfound, neither is health permanent nor life perpetual. The panacea then sought for has given place to hygiene.] 8. The best means of increasing the human race.

The works above enumerated afford incontestible evidence that Hindoo medical writings were the result of observation and experience; especial reference occurs in them to the knowledge possessed by surgeons regarding the treatment of wounds received in battle (necessarily including the suppression of hemorrhage). The temperaments of individuals were studied. Psychology was discussed with as much zeal, and with success equal to that attained at the present time. The prevention of disease, equally as the method of cure, was comprised in the duties of the physician. Operations in plastic surgery, particularly the restoration of defective noses and ears, were performed. According to that early nosology, diseases were arranged according as to their causes, namely, those from vitiated humors (humoral pathology); derangements of blood (blood poisoning of modern science?); bile (hepatic?); wind, and phlegm. Toxicology, and the means of distinguishing poisoned food were carefully attended to, and lastly there was a special department of study devoted to certain particular diseases, in the list of which cholera was included. According to what may be called the principles of hygiene by the ancient Hindoo, the individual has much in his own power to lengthen or shorten his life. Man, said they, is like a coachman driving his own carriage; if this be well made, and if he continue to drive cautiously, it will go for a long time, but if he drives it upon bad roads the wheels will get injured, and the carriage will soon be worn out. He who indulges too much in the gratification of the senses "will die like a deer deluded to its destruction by sweet sounds of the lute which hunters rise." Diseases are produced either by sins committed in a former state of existence (heredity), by derangements of the humors, or by combination of these two causes. In order to enforce the various hygienic laws upon the people, enunciated by ancient Hindoo legislators, they were inculcated among the sacred works from a very ancient period. The influence of climate and locality on health was fully recognized, and both food and clothing were modified accordingly. The relation of particular diseases to season was noticed, and those which thus prevail were enumerated. The instructions laid down in regard to personal hygiene, including rising from bed, cleaning the mouth, exercise, bathing, clothing, food and sleeping were very precise. For example, the ceremony of "bathing the feet" of travelers had in view the removal of impurities, of local diseases, and fatigue, and further, "the prevention of the approach of devils." The cold bath was used in some inflammatory fevers, in madness, and locally in some external swellings. So much was diet relied upon that Hindoo physicians declared that most diseases may be cured by following dietetic rules; also that "if a patient does not attend to his diet a hundred good medicines will not remove his disease." The people were very careful about their drinking water, and ascribed many diseases to bad water. In the Veda shastras the use of wines and spirits were forbidden, but in the Tantra they are allowed, and the worshippers of Siva indulge in them. According to Sir William Jones the institutes of Menu to which the date of 12th century B. C. is assigned, contain notices of mead distilled from honey; of arrack from palm juice; rum from molasses; a spirit from

rice; and a spirit from flowers. [The latter, no doubt, such as is used at the present time, called darow, and obtained from the flowers of Bassia latifolia; in Hindostanee Mhowa. Soma, the Hindoo nectar, "the wine of immortality," was prepared from a species of Calotropos.] The smoking of tobacco was allowed.

In the Ay'ur Veda, surgery was considered to be the first of the eight departments of medical science. Very minute and precise instructions were laid down for the performance of operations, including venesection, which in some diseases "was half the treatment;" wounds and external injuries are classified according to their degree and character. A special chapter is devoted to the "Taliacotian" operation, although not so designated until many centuries after it had been practiced by Hindoo surgeons. The operations performed by them, if rude, were bold and hazardous. There is every reason to believe that anesthetics were well understood in India (and in China) at least six centuries before the Christian era, and, indeed, long prior to that period; thus, in reference to certain "magic rituals" in connection with the worship of Maitrëya Buddha "soporific incense," or "soul confessor," as it was called, was lighted and administered, recovery from its effects being brought about by means of "charms and cold water."

According to the Shasters, "Nature is liable to occasional irregularities from the impurities and the imperfect manner in which the elements and qualities are mixed together. The soul of the body microcosm, like the great soul of the world macrocosm, tends to retard these derangements, or to restore such irregularities (vis medicatrix naturæ)." Diseases were classified as being curable, chronic, and incurable. Another classification divides them into contagious and non-contagious; and further, into mental, bodily, and accidental. The general causes of disease are referred to, such as proceed from matters or objects of sense, from improper exercise, and from the seasons. Thus, "dyspepsia will be produced by being exposed to bad odors; hæmoptysis by carrying heavy weights; cholera fever, dysentery, etc., by irregularities of the seasons." Another form of disease (easily recognized in our own day) "is produced by sin." The three means of preserving life are briefly stated to be proper food, sleep, and government of the senses and passions.

Diagnosis was arrived at "by means of the five senses," and by asking questions. Much attention was paid to the state of the pulse, which was considered to possess a peculiar character for every disease. Prognostics in a given case "are often but slightly apparent to the general eye, and can only be detected by the eye of an experienced physician." Many of the "prognostics" enumerated are extremely characteristic. On the subject of fevers, the writings of the ancient Hindoo physicians are very extensive and exact. Among the causes of fevers enumerated by them are—using improper articles of food, exposure to the morning sun while fasting, fatigue, fear, or grief; drinking stagnant water into which leaves have fallen; visiting a new climate. They recognized four principal types, namely, continued, mixed, remittent (synochus), "accidental," and intermittent fever. Each type had its varieties—one of them as many as 13. The critical days were considered to be the 7th, 9th, 11th, 14th, 18th, and 22d; also that those who survived the latter period usually recovered.

Diseases affecting the mind were considered to be swooning, epilepsy, madness, and devil madness. Two kinds of spirits may enter the body and produce disease, namely, a good and a bad. Either may do so "in the same manner as the soul enters and leaves the body; as light enters water in a glass, or as heat or cold enters a body." The symptoms of cholera were exactly described, although at the ancient date now alluded to that disease, in India at least, does not appear to have prevailed otherwise than in sporadic form.

Whether the knowledge of animals possessed by the ancient Hindoos extended beyond mere acquaintance with their external forms and the names by which those animals were known, there appears to be now no means of determining. But with reference to the question which has been raised very recently as to whether or not there is anything in the writings of ancient philosophers or naturalists to indicate the acceptance on their part of theories allied to those to which the general term "evolution" has of late years come to be applied, the following quotation from Dr. Royle's work on the "Antiquity of Hindoo Medicine," p. 178, seems apropriate, and may well close the present section, namely: "It is remarkable that the incarnations of Vishna should be in conformity to the modern views respecting the gradation of animal forms, as displayed in ascending from the least to the more highly developed; so the incarnations proceed from the fish to the tortoise, thence to the pachydermatous boar, the carnivorous lion, dwarf, Rama, etc."

Although somewhat out of place here, yet

in a measure apropos to the question of how far certain so-called "advanced" theories are new, reference may not inappropriately be made to the circumstance noticed in Bunsen's "Egypt," that according to the belief of the ancient Egyptians, "the first principle of things is matter. From matter the four elements separated themselves, and animals were formed." Verily scientific belief in regard to organic life advances, but it does so in a circle. It has reached the point whence it started, many centuries prior to the Christian era in Egypt and in India.

There is every reason to believe that in ancient times the Chinese really possessed better and more correct knowledge of the medical sciences, including anatomy, than they have held at a later period. At a date, which is usually referred to B. C. 3100, the Emperor Chen-nong composed a work on Materia Medica. He is said to have discovered the good and bad qualities of medicine in the treatment of disease, and to have classified them according to their several properties into such as were cold, such as were hot, and such as were temperate. He "found out the counter poison of the earth;" he taught the means to restore health to the sick, and hence is esteemed to have been the "author and prince of physic."

About the date B. C. 2700, Hoangti, the Yellow Emperor, wrote on medicine. He instructed certain of his physicians, namely, Ky pe, Yeu fou, and Ley king, to examine the blood vessels; he directed the use of proper medicines for every distemper, and men lived out their time according to the due course of nature. The title of the work attributed to that royal author and physician is the Soo Wàn, or "Plain questions on subjects relating to health and disease."

The Chow dynasty lasted from B. C. 1122 to B. C. 250. During the period thus embraced numerous works on medicine were published, many of them of deep erudition, in which the opinions, practice, and prescriptions of their authors were clearly and systematically arranged. An important work published during that period was the Nan-King. The actual date of the work in question is given as B. C. 1050; it is still extant, and has been largely quoted by all succeeding authors. The general hypothesis of that time was that every disease acts successively upon the heart, liver, lungs and veins; that the crisis of the disorder is occasioned by its transition from one of these parts to another; and that it is of the utmost importance to distinguish the fit stage for attacking it by direct remedies, arresting its progress or changing its course in order to weaken it; and lastly, to determine when a crisis is to be hastened or retarded, or when the cure should be left wholly in the hands of Nature. Thus, we perceive in the theories here indicated the evident germs of those which, several centuries subsequent to the period now being considered, were formulated by classical authors in the West, and have, in fact, in one form or another, prevailed down to our own day, and still prevail. It is more especially interesting to notice the early date at which, in China, the doctrines of critical periods and of metastasis were acknowledged in practice.

"Vital heat and radical moisture," the seat of which latter principle the ancient Chinese medical writers placed in the organs already named, constitute the two natural principles of life, of which the blood and the spirits are only the vehicles. Vital heat they, on the contrary, assigned to the intestines. According to their physiology, also, the body with its nerves, muscles, veins and arteries, resembles a stringed instrument, whose various parts emit various sounds, or rather, have a temperament proper for each, and suited to their figure, situation, and particular uses, in the same manner as a string emits a different sound according to the place where it is touched, or the strength or gentleness employed, discovering whether it be too much stretched or too much relaxed. Here, again, we meet with the original ideas which at a date long subsequent were to assume a western garb, and under such garb have their influence in medical science, even down to our own day. For example, the idea of "the spirits" and the blood being independent of each other, although united in life, was subsequently to be exposed by Herophilus; the distinction between arteries and veins to be noticed by Hippocrates; while at the present day the theory of "localization of function," although discussed as a subject altogether new, is but shorn in its proportions as compared with the corresponding theory expressed by learned men in ancient China. Here, also, we find anticipated the doctrine of strictum and laxum to be long subsequently enunciated by "classical" teachers, and, like those already noticed, brought down to the present day—for do we not still prescribe for "nerves too highly strung?" Do we not also for systems relaxed order "bracing air" and tonics?

During the same period also, namely, the Chow dynasty, diseases were classified according to their prevalence at particular seasons of the year—headaches and neuralgic affections under spring; skin affections under

summer; fevers and agues under autumn; bronchial and pulmonary affections under winter. And does not a similar classification hold good to-day? As a necessary precaution, perhaps, all potions intended for administration to the ruler of a state had in the first instance to be tasted by his prime minister. The public were warned against rashly swallowing the prescriptions of any physician whose family had not been for three successive generations in the medical profession. The ancient Chinese evidently set a high value on the advantage of accumulated experience, and in the rules here expressed pre-indicated the sect of empirics long subsequently to be recognized.

In the sixth century B. C., Chen-kwei, a celebrated Chinese surgeon, lived. He was so skilled as an operator that he is said to have "cut open the abdomen, removed the diseased viscera, and neatly sewed it up again without the patient having suffered anything." The question accordingly presents itself, was the operation thus alluded to ovariotomy, and was it performed under anesthesia? Further reference occurs to a somewhat similar operation, similarly performed about the period of B. C. 200. At that date it is recorded that "if the sick man is suffering from some internal complaint, and medicines produce no satisfactory result then Hua, the surgeon alluded to, administers a dose of hashish; he now takes a sharp knife and opens the abdomen, proceeding to wash the viscera with medicinal liquids, but without causing him the slightest pain. The washing finished, he sews up the wound with medicated (antiseptic?) thread, puts over it a plaster, and at the end of a month or twenty days the place is healed up.

About the same period medical sects began to arise; subsequently they were classified under four divisions. The first of these employed large doses of medicines; the second used bitter and refrigerating drugs; the third tonics and stimulants; and the fourth purges and other evacuants; in reference to which sects the remark was made that "the doctors are very much divided among themselves, but the wise men are eclectics." (Op. cit.)

About the year B. C. 500, or, according to other authors, in the third century B. C., the famous work by Wang-Shuh-ho on "The Doctrine of the Pulse," was published. In that work reference occurs to a still more ancient treatise on the same subject; as however an epitome of the work by Wang-Shuh-ho is given by Du Halde translated from the original Chinese, the reader is referred thereto. "It is motion," said the Chinese physiologists of the period alluded to, "that makes the pulse, and this motion is caused by the flux and reflux of the spirits, which are carried to all parts of the body by twelve passages enumerated. As the blood and spirits are in continual motion they strike against and press the vessels in which they are conveyed thus, there must necessarily arise a beating of the pulse. In diseases of the heart it is necessary to consult the wrist at the left wrist. The continual motion of the circulation is in reality determined to a certain number of circulations; but yet there are in the pulse a thousand differences, according to the difference of age, sex, stature and seasons." Adverting to the same subject, the Abbe Grozier, who wrote in 1788, was of the opinion that the Chinese were acquainted with the circulation of the blood long before any of the nations of Europe. According to a more recent writer, "the circulation of the blood, unknown to the most learned of the ancients, and considered in Europe as perhaps the most splendid of modern discoveries, has for 2,000 years been familiar to Chinese physicians. The glory, however, which they may thereby justly claim has been greatly obscured by such irrational applications as to have made it doubtful whether they would not have been better without possessing this knowledge.

In the reign of We Lih, B. C. 468, 440 temples were erected and dedicated to the performance of ceremonies for averting the "pestilential wrath" of demons, "mighty ones," or "supernaturals," to which the occurrence of diseases and pestilences were then attributed. At this period anatomy is said to have been studied by means of actual dissection; also, that a theory of the pulse was accepted as a method of diagnosis. From the performance of ceremonies conciliatory of demons, the transition was easy to those in honor of "the healing kings." This accordingly took place in China, and at Soochow there exists even at the present time such a temple, or Pantheon, the "mighty ones" or "saints" represented in which appear to be as various as we have seen those to have been of ancient Egypt, medieval England, or modern India.

Of the physicians who flourished in China in the third century B. C., Hwa-to appears to have enjoyed especial eminence on account of the wonderful cures effected by him. He ended his days, however, by undergoing decapitation for the reason that he refused to trepan a famous warrior who had then established a military despotism.

And now we arrive at a time from which is to be dated the decadence of medicine in China. Between the years B. C. 210 lived

Chi Hoang Ti, second emperor of the Tsin dynasty. He had little regard for learning with the exception of astronomy, and to the study of that science he himself was partial. He ordered the destruction of existing works on various subjects, making exceptions, however, in favor of those on architecture and physic. But as in respect to one, so with the other of these subjects, it has apparently retrograded, until at the present time, medicine at least, and the branches of knowledge allied thereto, have long ceased to occupy the position he accorded to them in earlier history.

About A. D. 220, Chang Hae composed a work on Theoretical Medicine, and in it gave also a great many prescriptions. From that period down to the present numerous works on medicine have been published, a list of which is contained in the Chinese "Golden Mirror of Medical Authors."

[TO BE CONTINUED.]

ITEMS.

—He'd Kill Him Sure.—Some boys were engaged in perpetrating the murder of one of those harmless reptiles called water snakes which was lying in a ditch near the road side. They had thrown several stones at the poor thing and stopped to see if the vital spark had fled or was only playing possum, when a physician of some note drove up and stopped to see what was going on. The circumstances were related to him by the boys, who were still debating whether it would be best to throw any more at their victim when another snake was seen approaching the one which was partly killed and moved about as if to ascertain the extent of the injuries its mate had received. "That," said the physician, who was looking on from his buggy, "is the snake doctor." "Is it?" said the boys. "Then come along, fellows, for it is no use to throw another stone; if the doctor is tending him he is as good as dead, and nothing can save him." The medical man gave his horse a severe crack with the whip and drove off at a brisk canter. The boys left in an opposite direction, perfectly satisfied that the snake doctor would give a good account of his patient.—N. E. Med. Monthly.

—It is said that many cases of what are termed "nervous prostration" have been the result of laymen endeavoring to read the exhausting articles of medical opinions published in the secular press. The attention of grand juries should be called to this evil, and the interviewer and the interviewed should be punished.

—The College of Physicians and Surgeons of Boston conferred the degree of "Doctor of Medicine" on five—four gentlemen and one lady—at its Commencement, on May 28.

—Treatment of Ulcers of the Leg,—Dr. Roberts has (Polyclinic) recently had excellent results in chronic ulcers of the legs, after sprinkling powdered chloride of sodium thickly over the surface of the ulcer, once every three or four days, and dressing the sores twice daily with corrosive sublimate ointment. The ointment contains half a grain of the mercuric chloride to the ounce of cerate. Chronic ulcers with callous edges are often most expeditiously treated by the surgeon excising them by means of an elliptical incision, and closing the wound with sutures.

—Lumbar Nephrectomy.—Mr. Clement Lucas removed (in Guy's Hospital, on the 14th instant) a distended floating kidney, filled with large calculi, which could be felt through the abdominal parietes. The operation was performed without difficulty through the loin, leaving the peritoneum uninjured. The patient is progressing uninterruptedly toward recovery, her temperature continuing normal as before the operation.

—A New Method of Relieving a Cold.—A writer in El Siglo Medico strongly recommends the following as a certain means of relieving the discomfort incident to cold: Pour about a half pint of boiling hot water over about a dram of pulverized camphor, and inhale the vapors arising therefrom ten to twenty minutes.

Great relief is at once experienced, and after two or three repetitions the discomfort is said to disappear entirely.—Gazzetta degli Ospitali, June 21, 1885.

—Teacher: "So you can't do a simple sum in arithmetic. Now let me explain it to you. Suppose 8 of you have together 48 apples, 32 peaches, and 16 melons, what will each one of you get?"

"Cholerer Morgus," replied little Johnny Fizzletop, who is addicted to that malady.—Texas Siftings.

—We regret to learn that Mr. Lawson Tait has again thought fit to cast the weight of his influence publicly in aid of the antivivisection mania in England. We do not question his entire conscientiousness in the matter, and it is even conceivable that he might make a good argument in favor of the proposition "that vivisection is not only useless in solving riddles such as we have to deal with, but that it is absolutely misleading." A forcible argument could perhaps be made in support of that position, but certainly not one

that would prove convincing to the present generation of medical men, who owe almost all that they possess of real physiological knowledge to the practice which Mr. Tait condemns.—New York Medical Journal.

—THE TREATMENT OF SCABIES.—The following treatment is recommended by Dr. Comessati (Pharmak. Zeit. and Journ. de Méd. de Paris, 1885, No. 14,) as being easy and certain in its action. A solution is prepared containing four ounces of hyposulphite of soda in one pint of water, and the whole body is washed with it in the evening. The next morning the skin is sponged with dilute hydrochloric acid (one ounce to the pint); sulphur, sulphurous acid, and chloride of sodium are formed, and the disease is, in most cases, cured by a single application.

—Bromide of Arsenic for Pimples.—It will be a great relief to suffering thousands to learn, on as good authority as Dr. Piffard, that the bromide of arsenic is a cure for pimples. He recommends a one per cent. solution, of which one or two minims are to be taken in a wine-glassful of water three times a day, on a empty stomach. The dose is to be diminished as the pimples begin to disappear.—Med. Age.

—Preparation of Iodoform Gauze.—Reber, of Geneva, gave the following directions (L'Un, Pharm., 1883):

℞—Resin, powdered - - - - - - parts 50
Alcohol, 94 per cent. - - - - - " 600
Glycerin - - - - - - - - - - " 50

After having treated the gauze with the solution, sprinkle upon it the iodoform (about 40 parts for a quantity of gauze impregnated with the whole of the above mixture) uniformly.

Gaudet recommends the following rapid plan: Dissolve in 800 or 900 parts of ether, as much iodoform as it will take up, aiding solution by trituration, and even having a little iodoform in excess. Then pour the liquid into a wide-mouthed vessel, put in the gauze, previously washed and dried, and, when it is saturated, remove and dry it by a brief exposure to air. Keep it in a well closed vessel protected from the light.—National Druggist.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE-HOSPITAL SERVICE FOR THE WEEK ENDED August 1, 1885.

Fessenden, C. S. D., Surgeon. Leave extended ten days on account of sickness. July 27, 1885.

Godfrey, John, Surgeon. Granted leave of absence for thirty days. July 29, 1885.

Irwin, Fairfax, Passed Assistant Surgeon. To proceed to Richmond, Va., and Wilmington, N. C., as inspector. July 28, 1885.

Ames, R. P. M., Passed Assistant Surgeon. Granted leave of absence for thirty days. July 27, 1885.

BULLETIN OF THE NATIONAL BOARD OF HEALTH.

WASHINGTON, D. C., August 4, 1885.

The following abstracts from Consular reports just received at this office are furnished for your information. The Board will hereafter receive reports regularly, and you will be furnished promptly with all information received affecting the public health.

PLACE.	Week ending	Cholera..... Cases / Deaths	Yellow Fever. Cases / Deaths	Small Pox.... Cases / Deaths	REMARKS.
Antigua, W.I.	.....	....	....	....	.....
Cienfuegos, "	.....	....	....	....	.....
Cardenas, "	July 18	....	....	....	No epidemic diseases reported.
Cape Haytien, "	" ..	....	....	....	.....
Curacoa, "	" 18	....	....	....	do. do.
Havana, "	" 22	....	22 3	....	Typhoid fever prevalent.
Matanzas, "	" 22	....	....	....	Intermittent fever prevalent.
Nassau, "	" ..	....	....	....	.....
*St. Thomas, "		....	....	....	.....
Laguayra, Venez.	" 18	....	....	....	No epidemic diseases reported.
Alicante, Spain.	,, ..	....	....	....	.....
Lisbon, Portugal.	" ..	....	....	— 6	.....
Paris, France.	" 18	....	....	41 1	Typhoid fever C. 199; D. 38.
Bordeaux, "	" ..	....	....	....	.....
London, England.	" 11	—	....	101 21	Diarrhea, 113 D.
Trieste, Austria..	" 4	....	....	— 3	Diphtheria prev't.
†Valencia, Spain.	" 11	1747 964	....	....	.....
Venice, Italy.....	" 4	....	....	— 5	.....
Bombay, India...	June 23	— 2	....	....	General sanitary condition good.

NOTE—Upper figures, cases; lower, deaths. P. Province.

*Four deaths from yellow fever among soldiers in garrison prior to May 1, when detachment was removed; no cases since. June 23, quarantine was established against all Spanish ports, and the importation of rags, wadding, wool, etc. prohibited.

†The epidemic is reported as spreading still, but becomes less virulent.

THE WEEKLY MEDICAL REVIEW.

OBSTETRICS AND GYNECOLOGY.

VOL. I. No. 33. CHICAGO AND ST. LOUIS, AUGUST 15, 1885. TERMS: $3.50 A YEAR.

TWIN MONSTROSITY—ALLEGED MATERNAL IMPRESSIONS.—Dr. B. R. Johnston contributes the following peculiar case to the British Medical Journal:

A. T., æt. 42, married nineteen years, had ten children, the eldest eighteen years old. Menstruation ceased last March, and she expected her confinement about the middle of November, at which time she consulted a medical man, who told her that if she went much longer she would probably have twins, she replying that she did not care so long as they were not "Siamese."

On January 22 she went to the Lying-in Hospital, and stated that she thought there was "something wrong with her," and that hemorrhage had previously occurred. On the 23d, having been sent for, I found she had been in labor since 10 P. M., on the previous night. On examination the head was found pressing on the perineum, and all pains had ceased. This being the case, I immediately applied the forceps and delivered the head without difficulty; but it was not until after prolonged traction that the shoulders partially emerged, when I discovered that there was an outgrowth from the chest which prevented any further movement in that direction. I therefore passed my hand round the lower part of the abdomen, and delivered the breech and legs. The child was now entirely born, but finding it connected from the neck to the umbilicus with another child still in the uterus, I laid hold of the legs of the second, and delivered it without difficulty. The placenta followed in a few minutes. There was only one cord, proceeding from a common umbilicus. The children, both born dead, were males. In the ordinary position they faced one another, but the connecting link was sufficiently lax to allow them to lie partially side by side. In every other respect they were perfectly formed, and weighed eleven pounds.

The next day, when the mother heard of their condition, she told the nurse that in March last she went to see the "Two-headed Nightingale," and fainted at the sight.

I regret to say that the occurrence so affected her that three days afterwards she committed suicide by jumping out of a window.

RUPTURE OF THE UTERUS.—Dr. E. W. Mitchell related the following case at the Obstetrical Society of Cincinnati:

Mrs. B., colored, aged 34 years, is the mother of seven children. Her last three children, by a second husband, died just before, or soon after birth. No specific history on either side could be elicited. Her former labors have been tedious and one instrumental. Her general health has been fair.

Labor began at full term on the morning of Sunday, December 23. On Monday afternoon a physician was called who gives me the following history: At the time he entered the room the patient was having very severe pains. Soon after his entrance, in the agony of excessive pain, she threw herself upon her hands and knees, straining severely at the same time. She had no pains afterward, although the cessation of pain may have been due to the effect of chloroform which he at once proceeded to administer. Upon examination he found an arm protruding; failing in his efforts to turn he called in another physician. Both made unsuccessful efforts to turn the fetus. One of them finally succeeded in introducing the hand into the uterine cavity far enough to discover a rent in the anterior wall.

The nature of the case was then explained to the family and the proposition to operate made. Permission was refused by the husband. The physicians declined further responsibility in the case and left, after giving her morphine to be taken to relieve her suffering. If this history be correct it is altogether likely the rupture occurred at the time of the severe pain witnessed by the doctor.

On Tuesday morning I was called. I found the patient greatly exhausted and weak. Pulse 130 and weak. Upon examination the uterine body presented in the median line firmly contracted upon its contents. In the left iliac region was an irregular mass about the size of an orange, which seemed to be immediately beneath the abdominal parietes. The limp right arm of the fetus protruded from the vulva to the elbow. The other hand was in the vagina. Although no satisfactory history of the symptoms could be gotten from the demoralized friends, I concluded from the physical conditions present that I had to deal with a case of rupture of the uterus, and decided to attempt delivery by version. After the administration of a stimulant the patient was anesthetized; without difficulty and without the exercise of force the arms were pushed up into the uterus, a knee grasped and the body extracted. As some resistance was offered to the passage of the head, forceps were applied and extraction easily accomplished. The placenta was immediately removed by the introduction of the hand. Examination discovered a vertical rent in the anterior wall of the uterus, a little to the left of the median line, involving the whole cervix and extending apparently almost to the fundus. The uterus was also torn from its vaginal attachment through the entire anterior semi-circumference. The uterus was washed out with a hot bichloride solution, 1 to 1500. It contracted at once firmly. External heat was applied and stimulants given with the hypodermic syringe. The patient did not regain consciousness, and died six hours after delivery. A post-mortem examination could not be obtained.

Dangerous Hemorrhage from Rupture of the Vagina During First Coition.—The Maryland Medical Journal relates two cases of this kind reported by Dr. Paul Mundé of New York:

"In the first case the rent was intra-vaginal, extending inward from the nick in the hymen to the left of and parallel with the urethra. The patient was in collapse, with occasional momentary loss of consciousness. The hemorrhage was controlled by tightly tamponing with disks of alum cotton carried down to the very vulva.

The second case was a patient twenty-two years of age, who was feeble and weary-looking from the loss of blood. After the bleeding had been discovered, two physicians had attended, one giving ergot and the other ordering the application of ice to the abdomen, without making an examination. The hemorrhage continuing Dr. M. was sent for, and upon examination found no bleeding spot in the hymen, but the vagina was full of coagula. This being removed a deep fissure, two and a half inches in length and one half an inch in depth, was discovered in the left vaginal wall, extending from about an inch above the hymen nearly to the cul-de-sac. The edges were ragged and bruised. A similar tampon to that used in the first case effectually controlled the hemorrhage.

In neither of these cases was there apparently any disproportion of the generative organs, nor had unusual violence been used. The vaginæ were perfectly healthy in appearance, and both patients were young and of good condition.

Dr. Mundé refers to a case cited recently by Dr. Chadwick, in which senile atrophy of the vagina was apparently the predisposing cause, and also to a case of Zeiss where the recent confinement of the woman, and the adhesion of the cervix to the lacerated side of the vagina, sufficiently explained the accident. [Vid. Review, No. 30, p. 233.—Ed.] There was reported a few years ago in a Canadian journal a case where a sailor just returned from a nine years' cruise, on having coition with his wife, ruptured the vaginal

vault to such an extent that she came near dying.

Dr. M.'s cases are interesting as showing that this distressing accident may occur without undue violence or any apparent cause, and they also teach us the importance of making an examination in all such cases before attempting treatment, which must consist of the tight tampon, repeated as long as danger of recurrence of hemorrhage exists, or if the rent is external, where a vaginal tampon can not well control the hemorrhage, suture should be used."

Milk Diet in the Albuminuria of Pregnancy.—Tarnier's treatment (Med. News) of the albuminuria of pregnancy by an exclusive milk diet has counted in his hands, as well as in those of others, many successes, and it has received a very strong endorsement from Carpentier, among recent obstetric writers. Under this treatment it is usual to see the albumen lessen, in some cases disappear, and the symptoms which threaten eclampsia, such as headache, dimness of vision, indisposition to exertion, and drowsiness, cease, or become much mitigated. In some cases, however, it is important to conjoin with milk diet a hot bath once in three or four days. The temperature of the bath should be from 98° to 100°, and while in the bath or immediately after it, the patient should drink a tumbler of hot milk. A profuse perspiration usually follows, and the relief is prompt and positive. In one case, however, now under observation, a primigravida now in the eighth month, who has had albuminuria for at least four months, and who derives marked benefit from the hot bath, has also a very serious discomfort following it. There is unusual and violent activity of the fetus always occurring after the bath, so that she is for some hours unable to sleep—a very serious inconvenience, as the usual and most favorable time for the bath is just before retiring.

Valuable as most practitioners regard the milk treatment of the albuminuria of pregnancy, some entirely reject it. Pajot, for example, in a recent discussion held at the Paris Obstetrical aud Gynecological Society, and reported in the Journal of d'Accouchements, May 5, refers to it as a bitter pleasantry. One of his arguments against the milk treatment is that infants from six months to the end of the first year are peculiarly liable to eclampsia, and yet they are then on milk diet. Gueniot very well answered this argument by saying that those infants that have eclampsia are not albuminuric, and the milk diet in albuminuric pregnant women does not act upon the eclampsia, but upon the albuminuria; it is only indirectly by curing the albuminuria that it renders eclampsia much rarer. It is impossible to attribute infantile and puerperal eclampsia to the same cause.

Non-Developed Child.—Dr. W. B. Lucas, of Mendon, Mo., related this anomaly in the Kansas City Medical Index. He delivered a woman of a strong, healthy child at 3 a. m., and an hour and a half later of a second child. Regarding this second child he is in doubt whether it really was a child. He says:

"It felt like a child and had some slight resemblance to a child, but that resemblance was so slight I was unable to name it, but will call it a child for want of a better name. This child was all body, no head, neck, arms or legs being present. It was of an oblong, smooth, oval shape, with some peculiar points which I will notice. It was probably ten inches long and four or five inches through, and weighed four pounds. The surface was smooth, and looked and felt like that of an ordinary child. Down or small hairs could be seen on most of the body. One end resembled a child's head to the touch, though no well marked bones could be traced. There was no difference in the size of the head, neck or body. On the part that resembled the head was a spot of long black hair, as you occasionally see in children. The back had no peculiar marks. It was simply a smooth surface, slightly bent forward; could feel or see no depression as to the back. The front surface, as I would call it, had some marks which I purpose noticing. Near the centre was an aperture, simply a round hole, leading

into the abdomen, as it were, and the only one I could detect. Near the orifice was something that resembled an ordinary scrotum to the eye, but on opening it water came out; about an inch from this was a hardened lump the size of a small marble.

On one end, opposite to that of the supposed head, was a small projection about two inches long and the size of your ring finger. It seemed to have a joint where it joined the body; it tapered from the body as an ordinary leg, at the end of which were three projections about one-half inch long, very blunt, resembling toes. Both arm and head seemed to have some bone development.

Found but one placenta, which was of an ordinary size, and but one cord.

How the child grew without a cord and placenta I am at a loss to know."

Extra-Uterine Pregnancy Successfully Treated by Electricity.—Dr. Wm. Gardner (Canadian Practitioner) related the following case at the Montreal Medico-Chirugical Society:

"Mrs. ——, aged 38, married 19 years, has had four pregnancies—all to full term, labors natural, recoveries tedious. Ever since her second labor, 16 years ago, has suffered from symptoms of uterine disease. The last child was born nine and one-half years ago. Since then uterine symptoms have been worse, and consisted of pelvic and lumbar pain, bearing down sensations,proper and protracted menstrual periods, and leucorrhea. The last period, previous to the symptoms to be detailed, occurred about October 1, 1884. On the 16th of the same month a single complete act of coitus occurred, there having been abstinence for many months previous, and in the interval before patient's illness. From the 16th October no proper menstruation, but slight discharges of bright red blood at irregular intervals. She suffered from distress after food, nausea and occasional vomiting, and suspected that she was pregnant. On the 20th of December Dr. Gurd, of Montreal, was sent for, and found her suffering from sudden intense pelvic and abdominal pain, vomiting and faintness, amounting to collapse; deadly pallor, weak pulse, normal temperature. Pain principally referred to right iliac region. Next day she seemed worse, and Dr. Gardner saw her in consultation, and on examination found decided tenderness and induration of right iliac region. No general distension of the abdomen. By the vagina the uterus retroverted and prolapsed; the vaginal portion very low, almost at vaginal orifice, slightly softened. The fundus to the left. On right side of and behind uterus a firm mass, closely attached to that organ. The diagnosis was hematocele. Morphia was freely given. She rapidly improved. Two or three weeks later a similar milder attack. After an interval, a third more severe about the end of January. The tumor on the right of the uterus has increased. Pigmentation of linea alba, areola and follicles about nipple, and, to a less extent, of whole lower abdomen. The sound entered four inches; cavity empty. Vaginal portion remarkably soft and swollen. Anterior lip lying in vaginal orifice. Pulsating vessels at sides of vaginal roof. Extra-uterine fetation was now strongly suspected. Doubtful points were marked hardness, and absence of fluctuation or ballottement of tumor. On the other hand, in a few days distinct bruit de souffle was heard. By the middle of February the tumor extended as high as the anterior superior spine of ilium, and an inch to the left of the middle line, and completely filled the space included within the lines mentioned and ramus of the pubes and crest of the ilium. It was now decided to use electricity. A strong faradic current, as strong as the patient could bear it, was passed through the mass to the right of the uterus. One pole, terminated by an olive-shaped insulated bulb, was passed into the rectum against the tumor. The other pole was a large wet sponge, applied over the mass in the right iliac region. The current was allowed to flow from five to eight minutes, and repeated daily five or six times. pain and tenderness of the tumor were at first increased, but after the third application the bruit de souffle was

stilled. A few days after the cessation of the electricity, the size, pain and tenderness of the tumor was much reduced. Shortly afterwards the patient began to have labor-like pains, with moderate bleeding. On the second day of these symptoms, examination showed dilatation of the cervix, so that the finger easily reached the fundus and cornua of the uterus, and discovered a decidual membrane being separated. This was peeled off. The bloody discharge continued a few days longer. She now improved so rapidly that towards the end of March, at her urgent request, she was allowed to leave her bed and go to a couch in the same room. But this was unfortunate, for the tumor now became very painful and tender, the surface over it assuming a blush and becoming edematous. Temperature rose to 103° F., and altogether her condition caused much anxiety. The question of opening and draining the supposed suppurating sac was seriously considered, but she soon began to improve in every respect, and in a few weeks was able to leave her bed. On the 15th of June she was examined. She is still pale and thin, but has fair appetite and digestion. Has menstruated twice and profusely. Slight pain increased by exertion. Bladder irritable. The hypogastric tumor still present, but greatly reduced in size and tenderness. Per vaginam, all evidences point to recession of the mass. The uterus measures three and one-half inches, and is much firmer.

Dr. Gardner remarked upon the great interest of the subject, an interest arising out of the supposed rarity of the condition, the difficulty of diagnosis, or, perhaps, the rarity with which a diagnosis is made; a tragic and fatal termination alone revealing the true nature of the case, and the recent successful procedures adopted for its treatment.

Lawson Tait has secured some remarkable successes by abdominal section, ligating, and excising the sac and its contents. His operations have, for the most part, been done in patients who were suffering from the symptoms of rupture with impending death. But Thomas, Lusk, Garrigues, and others in the United States, have had equally remarkable successes in averting such an occurrence by an agent so powerful, so manageable, and yet, as all experience shows, so harmless as the faradic electric current, applied as in the case now related, and in many others. It is an agent within the capacity of the merest tyro in medical knowledge. Dr. J. G. Allen, of the United States, is credited with the first cases so treated. To be used to best advantage it must be applied early before the third month, when rupture of the sac so commonly occurs. The question of diagnosis would, of course, always be most important. This might be difficult, but would rarely be impossible if, in the presence of subjective symptoms, a careful bimanual examination (under ether, if necessary) were made. Dr. Gardner offered the case as a contribution to the literature of the subject, and believed it to be the first case of the kind published in Canada.

SELECTION.

HYSTERECTOMY FOR FIBROUS TUMORS OF THE UTERUS.

BY THOMAS KEITH, M. D., LL. D., EDINBURGH.

From "Contributions to the Surgical Treatment of Tumors of the Abdomen."

The natural history of the ordinary uterine fibroid is different from that of other tumors. As a rule, it has only a limited life. Other growths go on, and vex or kill according to their nature or place in the body. A stone in the bladder, if it be not taken away, is there forever, and as it grows, it torments the more. But to the woman with a fibroid uterus, who has passed the best of her years in weariness and pain, middle age brings relief, and old age may be spent in peace. Hence, the difficulty in knowing how far we are justified in advising interference for a disease that troubles for a time, though it rarely kills. It is often said that the operation for the removal of uterine fibroids is in much the same position now that ovariotomy was five and twenty years ago. It is not so. It never will be so. The history of these two diseases is entirely different. As a rule,

ovarian disease is a merciless one; it goes on and kills. As a rule, the active existence of a uterine fibroid is limited; it rarely interferes directly with life. When menstruation ceases, the troubles of the patient soon begin to pass away, while the tumor itself, after a time, becomes smaller, and in a few years little or no trace of it may be found. The patient gets along, lives more or less comfortably, generally not even aware of its existence, and dies of something else. Indeed, a large proportion of fibrous tumors interfere little with a woman's comfort during the whole menstrual life. Patients often become anxious about large growths, of the presence of which they were unaware till their attention was called to them by their friends. But in a certain proportion—not necessarily in cases of large tumors, and if I were to make a guess, I would put the number of such at about five per cent.—life is a long weary burden; a little respite is got only during a short interval between the periods, and often there is not even that. These unfortunates live on somehow, a burden to themselves and to their friends, but they rarely die from their tumor. In an advanced case of ovarian disease, be the local difficulties what they may, one can honestly encourage a woman to run any amount of risk. She has not much to lose—a few months only, it may be, of ever increasing suffering—and she may gain much by an operation, having much to gain. It is quite different in the case of nineteen-twentieths of those who have a simple uterine fibrous tumor. They may have years of fair health before them; and even in the wosrt of them, the chances are, that they will live on—not in comfort, certainly, some perhaps in misery—but still they will live and not die. These have not much to gain by chancing a dangerous operation, and they may lose much, having much to lose.

Till of late years uterine tumors were let lie undisturbed unless when they were mistaken for ovarian cysts; but the restless surgery of to-day will let nothing alone; it has no patience for the menopause, and would attack all and sundry in some way or other, till one almost begins to think that individual responsibility has become old-fashioned and gone out of date. So far as operations for the cure of this disease have yet gone, the mortality is out of all proportion to the benefit received by the few. In the last edition of his book Sir Spencer Wells gives his results after hysterectomy as follows: Twenty deaths in thirty-nine completed operations, or one in every two operated on. In thirty-one exploratory incisions for fibroid, partial operations or attempts at removal, one out of every six died; while of those who survived the abdominal section, brief notes are given of other eleven cases, fatal, mostly within two years, some within one. The most successful of all the London operators by far is Dr. Bantock, and his numbers are the largest. Abroad, the best results have been got by Professor Schroeder of Berlin and Dr. Hegar, whose mortality is not above ten per cent. Dr. Bigelow of Washington has lately collected all the cases placed on record up to March 1884. At best, this must be an imperfect list, and can only show the least bad side of the operation. Of 359 operations there were only 227 recoveries and 132 deaths, or a greater mortality than one out of every three operated on.

Had this frightful mortality been the result of operations done for the extreme cases of uterine tumors, where the sufferings were great and life had become a useless burden, then there might be some excuse for it, but many of these operations were done in cases of small tumors that were giving little trouble, or of peritoneal outgrowths that were giving still less; and then the disease for which these operations were performed is, of itself, only very rarely a fatal one. The sum of misery in these 359 operations to the subjects of them, and to their friends, is something simply incalculable. So far as hysterectomy has thus gone, it has done more harm than good, and it would have been better that it had never been. If these be the best results that surgery can give, then the sooner this operation is laid aside the better.

Fortunately for those afflicted with uterine fibroids, the prospect of relief that has lately opened out to them, by the safer operation of removing the ovaries, is one welcomed by all. This will diminish the number of cases for hysterectomy, though it will not supersede it altogether. For the success of the operation of removal of the ovaries and tubes it seems to be almost essential that it should be performed when the tumors are small; the ovaries will then be almost easily reached; whereas, if the tumor be allowed to grow large, there is a probability that one, or perhaps both, ovaries may not be removable even when got at. I have failed, in nine of the thirty-eight hysterectomies that I have performed, to remove the ovaries, simply, I believe, because the operation was generally attempted in cases where the tumors were too large, and in every one of these I had to go on and remove the uterus—sometimes under very unfavorable conditions. Sometimes the ovary is so low down in the pelvis and

adherent that it cannot even be reached; sometimes in very large tumors it is elongated and imbedded in the capsule of the tumor in such a way that, knowing how vascular the capsule is, it would be a most unwise proceeding to attempt interference with it in any way. Those who were present will not soon forget a scene that happened one afternoon in the hospital here. The operation was one for the removal of the ovaries for great pain, and to check the growth of a small bleeding fibroid. It was late in the day when the operation was begun. Both ovaries felt enlarged and fixed on the tumor, each being about three inches from the middle line, about the level of the iliac crests; a short simple operation was expected. The right ovary, with the Fallopian tube enormously enlarged, was closely adherent to the tumor. This, with the end of the tube was tied, with barely room to hold the ligatures, a small fragment of ovarian tissue being left included in the ligatures; of the left ovary only a small part the size of a walnut could be brought into view. A long fine trocar was pushed into it, and some thick tarry-like fluid escaped; but on putting on the aspirator, several ounces came away. The left ovary was evidently much larger than was expected. The opening was enlarged and the hand got in. To do this some adhesions had to be separated, and there was some surface bleeding. An elongated cyst, closely fixed on the tumor, was now felt, extending beyond the reach of the hand and dipping down into the pelvis. At last, by separating more adhesions, and causing more bleeding, I was able to feel the distal end of the ovarian cyst, but it was all firmly incorporated with the capsule of the tumor. With some force the whole was stripped off. It was seven or eight inches long,and with it a dilated tube. At once the wound filled with blood in the most alarming way. Sponges were packed in, and after waiting for a time these were withdrawn, when the hemorrhage went on as much as ever. This process was repeated over and over again. I would now fain have removed the uterus, but this was not practicable from the way the tumor was fixed in the pelvis, and, indeed, everywhere. The wound was more enlarged, and part of the bleeding surface was with difficulty brought into view. Some points were stopped by the thermocautery, but on removing the sponges, blood came as fast as before. A pair of long forceps could be pushed quite low into the left side of the pelvic cavity, which was full of blood-clot. It was now getting dark, and the patient was likely to die on the table. A sponge soaked in perchloride of iron solution was pushed down, left ten minutes, and then slowly withdrawn. A large tube was put in, a few stitches above and below were introduced, and nearly half the wound was left open in the centre. As the patient was placed in bed, blood was again filling the opening. Pressure with pads of cotton-wool and a bandage was then trusted to, for by this time she was pulseless and more dead than alive. Some hours after, on removing the dressing, there was a flat coagulum under the cotton-wool, extending up to the neck, but bleeding had ceased. It did not recur, and she ultimately recovered. I shall think twice ere I again strip off an ovarian cyst from the capsule of a soft fibroid unless I am sure of being able to bring the whole separated surface into view.

For myself, I was slow to begin this operation. Many uterine tumors of all kinds have passed through my hands. The greater number of these gave little or no trouble at any time. In some there were times of pain,and attacks of hemorrhage, and then long intervals of repose; a few even entirely disappeared of themselves, and many, I may say hundreds, got over the menopause with little disturbance, though, as a rule, menstruation was prolonged. But there were some who suffered, almost without ceasing, year after year, and at the time death would often have been welcome. Now, I sometimes see some of these old bad cases of whom I was wearied —and who, I am sure, were equally tired of me— enjoying a fair amount of health, and able to live like other people. Wishing to have their view of the situation, I tell them that nowadays their tumor would be removed, and that, had they lived a little later, much of their former suffering would have been spared them. The reply has invariably been, "I am now so thankful that I had no operation." I meet with old fibroids in patients of all ages. I saw one the other day in a healthy lady of eighty-four. I see almost daily in the street one whom I attended for years. She led a dreadful life with her tumor for upwards of twenty years, till it had reached an enormous size. Now it gives no trouble. She is nearly seventy years of age, and year by year her size is becoming less perceptible; that some have dropped by the way, unheard of, is likely enough.

One would expect that the greatest immediate risk from uterine fibroids would arise from hemorrhage, yet a death from this cause appears to be rare. I have never once met with it in my own practice, though many a patient seemed to be almost on the point of

dying from severe floodings during the menstrual period. Once, long ago, I was present at a post-mortem examination of a young woman who had rapidly bled to death. Suspicions had arisen. The cavity of the uterus was large, and there was a sub-mucous fibrous tumor with some varicose veins on its surface, and from a small crack in one of these veins the fatal hemorrhage had come.

Indirectly, however, simple fibrous tumors, especially those of large size and those that bleed, may be the cause of death oftener than we think. In some, the excessive anemia that they produce seems to be the cause of paralysis. I have seen several deaths from embolism, the result of inflamed uterine veins. Several times I have seen chronic peritonitis occasion great trouble, and not infrequently the peritoneum becomes the seat of malignant or papillomatous deposit, especially if the tumor be large. They are often the source of danger in all cases of abdominal inflammations, and they add much to the suffering of those who are the subjects of diseased heart or lungs. When they become active again, after menstruation has ceased, the cause of the activity is generally to be found in some sarcomatous degeneration—of this I have seen some instances. I have only met with a single case where there could be little doubt that the fibroid has begun to grow after menstruation has entirely ceased. Even in the soft edematous fibroid, the tendency is for growth to cease—though this form is very unwilling to stop like the harder tumors.

The cases in which, with our present knowledge, hysterectomy may be reasonably advised are these—

1. In very large rapidly growing tumors of all kinds in young women. By a large tumor I mean a tumor upwards of twenty pounds.

2. In all cases of real fibrous cystic tumors, if they can be removed. Also, in all cases of suppurating tumors.

3. In most cases of soft edematous fibrous tumor. These often grow to an enormous size, far larger often than any ovarian tumor. I have seen one that would not be less than two hundred pounds weight. Sometimes large quantities of red serum can be removed with much relief, and I have several times been able by this means to carry patients over the menopause, when the necessity for further puncturing ceases. These tumors seem to open up the broad ligaments more than the ordinary hard tumor, and some that I have removed have had very extensive pelvic attachments. These tumors are much reduced by free purgation.

4. In cases of large bleeding fibroids of any age, provided that the patients are not approaching fifty years of age, and provided that the lives are practically useless, and that further experience in the operation shall show that the mortality of hysterectomy is likely to diminish.

5. In certain cases of tumors surrounded by free fluid, the result of peritonitis, provided that the fluid shows a tendency to reaccumulate after two or three punctures. My own experience in such cases is, that after one, two or three punctures, the fluid does not collect and it often disappears of itself without any interference. It must not be forgotten, however, that the long-continued irritation of the peritoneum, by very large tumors, is apt to be followed by degeneration of the surfaces of a sarcomatous and cancerous character. On this point the microscopic examination of the fluid gives positive evidence which will settle the question of interference in any way.

These embrace every form of case in which I have yet ventured to interfere by operation. In every case, once begun, the operation was completed, sometimes with great difficulty. Indeed, there is no operation that tries one so much as the removal of a large, badly adherent uterine fibroid. All but one were cases of supra-vaginal hysterectomy. Nearly all were under observation for some years—some for many years. A gradual deterioration of health had been watched, till the stage of uselessness and wretchedness was reached, when death seemed often to be preferable to life. I have never seen such pronounced anemia as existed in some of these patients, and anemia of itself does not certainly forbid operation. Indeed, some of the most anemic patients did better than the others. The average weight of the tumors—fourteen pounds—shows at least that there was no hurry in interference. All but six of the thirty-eight were, from their condition in life, hospital patients. Their position was laid before them, and they were allowed to decide the question of operation very much for themselves. Some preferred to let bad alone, and these are still working on in more or less discomfort or misery, waiting for the menopause. The argument that life was threatened was never used. Were I anxious for operations, I might ere now have done two or three hundred during the last ten years; and from what I know and hear, a great number of uterine fibroids are removed, or attempted to be removed, without the slightest necessity.

[TO BE CONTINUED.]

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THE RESISTIBILITY OF THE TUBERCLE BACILLUS.

Giuseppe Sormani and Eugène Brugnatelli have made a series of numerous experiments for the purpose of advancing the difficult problem of therapeutic and prophylactic measures that would destroy the bacillus of tuberculosis. The following list contains the remedial agents that appear to be the ones most suitable to destroy all trace of Koch's bacillus. Their practical therapeutic application remains a subject for clinical study.

To completely destroy the organism the following relative proportions are requisite:

	Grm.
Lactic acid	1.0
Camphoric acid, saturated solution	1.0
Camphor, saturated alcoholic solution	0.7
Bromide of ethyl	0.5
Naphthal, b	0.2
Turpentine	0.2
Chloride of palladium	0.1
Creasote	0.1
Naphthol, a.	0.05
Carbolic acid	0.05
Bichloride of mercury	0.005

IPECAC IN PNEUMONIA.

Dr. Veradini, chief of the Bologna Grand Hospital, has made a careful clinical study of the depressing effects upon the circulation of ipecac in true pneumonia. He concludes and formulates as follows:

1. That large doses of ipecac were given empirically in fibrinous pneumonia by the leading physicians of the past century, on account of its depressant, antiphlogistic power.

2. That the employment of ipecac in large doses (2-4-6-8 grm.) does not have any evil effects, such as circulatory stasis, heart paralysis, and that nausea and vomiting seldom follow.

3. It is beyond doubt that such doses have a salutary influence in moderating the pulmonary congestion, in facilitating resolution, and, that, too, without any risks to the patient.

4. The large doses produce effects directly opposite to the emetic doses or principles. Ipecac so given produces, as stated, pulmonary ischemia, while emetics, as experimentally proven, are attended by congestion or active hyperemia.

5. This comparative action of ipecac and of emetics on heart and lung can be demonstrated experimentally on animals with induced pneumonia.

TERPENE AND ITS USES.

At the meeting held July 28, by the Académie de Médecine, M. Germain Sée communicated the results of his study of the treatment of catarrhal pneumonia, hemoptysis, and chronic bronchitis by terpene, the active principle of the various terpentines, obtained by rectification of the oil of turpentine. He claims that terpine is of energetic influence upon the respiratory mucosa and modifies the secretion decidedly and promptly.

He stated that:

1. It diminishes the purulent expectoration of phthisical catarrh. Whether the mucopurulent secretions come from irritated bronchi or from pulmonary cavities, whether the malady be in an early stage or in the phase of advanced purulent discharge, or that of

serious tissue-disintegration, terpene is indicated as soon as the amounts expectorated are so abundant as to pull down and wear out the patient.

2. It may be employed in the hemorrhage of incipient tuberculosis.

3. In the treatment of ordinary pulmonary catarrh and chronic bronchitis, independent of true asthma, provoking dyspnea merely by occlusion of the bronchi, terpene is the best means to lessen the hypersecretion.

4. Its prompt, unfailing and safe action recommend it in preference to the preparations of turpentine, or pine tar, or pineknots, which contain so little of the active principle, and place it higher than the oil of turpentine, which is not well borne. Terpene is even to be preferred to creasote, on account of its harmlessness and perfect digestibility.

5. The preferable mode of administration is in pill form or in alcoholic solution; the preferable dose is one gram.

6. In asthma of a purely nervous character, or that attending emphysema or dry catarrh, iodine and pyridine have an incontestable superiority.

Abuse of Bromide of Potassium in Traumatic Neurasthenia.

H. W. Page describes in the Medical Times and Gazette, 1885, No. 1814, the complex disturbances following railroad injury especially, and designates this condition by the term Traumatic Neurasthenia. It is an error to apprehend in this condition any material lesion of the cord. The first manifestations are those of shock, due to the psychical impression and fright. The further developments consist in restlessness, fear, depression, ill-defined pain, inability to perform physical or mental labor, insomnia, irritability, anorexia, asthenopia, etc., together with symptoms met with in hysteria, such as anesthesia, cataleptic and epileptiform conditions.

Page's experience teaches that these conditions improve gradually though slowly, and often complete restoration does not follow. The injured one may remain permanently damaged. Page believes that the use of bromide of potassium is a frequent factor retarding the cure and causative of unsatisfactory results in certain cases. The continued use of the salt in such cases is bad practice, inasmuch as these very symptoms may be so brought about. In cases Page has observed improvement, marked and rapid, after the discontinuance of the salt. He holds that its continued use is admissible in epilepsy only.

Meningitis Tuberculosa Following Lupus.

Doutrelepont reports in the Deutsche Medicinische Wochenschrift the case of a young girl, aged 18 years. She had lupus of the face in several places and scrophuloderma of the throat. In the lupous skin and in the granulations of the scrophuloderma tubercle-bacilli were demonstrated. Curetting and local applications of corrosive sublimate, together with arsenic and iron internally, rapidly improved the patient and cicatrization was progressing nicely. Soon thereafter, however, violent headache and vomiting ensued. A sample of blood drawn from the patient showed the presence of tubercle-bacilli. The autopsy showed the pia of the base of the brain sprinkled with translucent miliary nodules; foci of tubercle-nodules were found in the lower lobes of both lungs; the ileum had several tuberculous ulcerations. The blood contained in the venae jugulares and the heart was full of bacilli.

The tuberculous conditions of these inner organs was certainly preceded by the specific skin-manifestations, and Doutrelepont looks on them as the source of the general infection.

Ferran's Fatality.

The Madrid correspondent of the Berliner Klinische Wochenschrift writes, Importial, July 25, 1885, that Dr. Ferran, who inoculated himself seven times, was taken with "cholera," as he says, through infection with the broth with which he works.

Van Ermengen has certainly reported that Koch's bacillus is contained in the fluids used by Ferran; but they are rather scanty and of small size. And although Ferran's practice of inoculation does not appear at all warranted, still we must concede that the future of such preventive measures is not foreclosed. The successful attenuation of specific virus is a magnificent achievement.

Operative Measures in Pyloric Stenosis.

R. Winslow gives in the American Journal of the Medical Sciences, April, 1885, a statistical review of the operative measures devised for the relief of pyloric stenosis. The first of his tables represents sixty-one cases of resection of the pylorus; of this number forty-four were fatal. Kramer in the Centralblatt f. Chirurgie, No. 31, 1885, reports that the number of pylorectomies has in the meantime increased to eighty-two,with sixty-one deaths. In seventy-two cases the operation was performed for carcinoma; fifty-five died soon after the operation; of the remaining seventeen cases but one proved a complete success. The ten other operations were made for stenosing ulcer; six died, four recovered fully. Of the number that died immediately, the majority were complicated by extensive adhesions; in thirty cases that were not so complicated, seventeen survived temporarily.

Winslow does not approve of pyloric resection in cases of profuse hemorrhage from a simple ulcus rotundum, or of perforation of such an one. He would prefer laparotomy to ascertain the seat of hemorrhage, and advises ligation and cauterization, or, in case of perforation, paring of the edges and suture.

Kramer calls attention to the frequency of a stenosing recidio as the subsequent fate of those that survive the exsection. He states that two cases are already on record in which gastro-enterostomy became necessary after scarcely a year. This would seem to urge upon surgeons the carrying out of gastro-enterostomy originally in a number of such cases. By this plan the duodenum and stomach are occluded and a direct communication is established between the jejunum and stomach. A more radical removal, one taking in remoter tissues, could be so accomplished and a return better obviated. Such a communication, too, is more easily established than the gastro-duodenal union and a strictured union is far less liable.

Gastro-enterostomy, according to Kramer, has been done twenty times so far. In four cases for non-carcinomatous stricture, with three recoveries. Of the sixteen patients so operated upon for cancer ten died soon after; one died four weeks after of metastatic tumors; the other five lived for months. The operation of gastro-enterostomy was devised by Woelfler, of Vienna, September 27, 1885, upon the spur of the moment, as a substitute for pylorectomy in a case in which excision was rendered inadmissible owing to the extensive adhesions of the pylorus to the pancreas.

Winslow is of the opinion that gastro-enterostomy is easier to perform than pylorectomy, takes less time to accomplish, and exposes the patient to fewer risks. Woelfler's case, referred to above, was inoperable as far as the removal of the malignant growth was concerned; he was on the verge of death but rallied after the operation and lived four months.

The passing of bougies through a carcinomatous stricture after gastrotomy is to be condemned for obvious reasons. Likewise duodenostomy, which has been twice performed with immediate death.

The method of Loreta of digital dilatation in non-malignant stenosis is to be applauded. Of six cases so dealt with three ended in complete recovery; in one case the success was not complete, two died soon after. Winslow holds that the operation should not exceed thirty-five minutes, and should be restricted to cases of simple cicatricial stenosis. In extensive, unyielding, or complicated stricture of this description, gastro-enterostomy would be the procedure promising most chances. In cancer, excisions should be confined to tumors that are free and movable and

not too large. Otherwise Woelfler's operation promises more prospects of prolongation of life in relative comfort for a period at least. The combined plan of excising the pylorus radically, then closing the duodenal and gastric lumina, and establishing a route from stomach to jejunum has been carried out once by Billroth, and successfully so.

Antipyrine.

Dr. O. T. Moore, of New Athens, Ill., writes us on August 12, 1885, with reference to the article on antipyrine contained in the Review.

He desires to add his experience in corroboration of the virtues set forth. Dr. Moore employed the drug in nine cases with great relief to the patients, and has found that children bear it well.

In one case of broncho-pneumonia in a child four years old, he gave, at a temperature of 103°, two doses of five grains, an hour apart. An hour after the temperature was 100°, and kept on sinking to the normal. No unpleasant manifestations whatever were observed.

In a case of convulsions, attended by a temperature of 104° in a child two and one-half years old, three grains were given twice and the temperature came down promptly and the child became lucid.

A third case was one of diarrhea and fever of 105° in an adult. Doses of fifteen and twenty grains proved effective.

The remaining six cases reported are malarial fevers in children ranging from two to fourteen years. Doses of three to ten grains were administered and repeated without any untoward effect. The reduction of temperature in these cases may, however, have been due in part to the yielding of the paroxysm.

A Medical Opinion on the Pall Mall Disclosures.—The British Medical Journal gives expression to its view on the Pall Mall publication. Its opinion is the more valuable since it is based on a knowledge of the bearing of the assertions made. The advice given as to remedial measures must give food for reflection to humanitarians the world over. The journal says:

"The Pall Mall Gazette has published, during the last three or four days, a series of articles describing horrible depths of vice, licentious cruelty and sexual infamies, in connection with the systematic depravation of young girls, which have produced a profound sense of horror, indignation, and disgust throughout the whole community. There are those—and it is not surprising that there should be—who find, in the prominent publication in a daily paper of details of atrocities so incredible, in language so outspoken, an evil which is in itself a shock to the delicacy of the lay mind. As to the method in which such facts should be made puulic, and as to the extent to which it is permissible to denounce the horrors of a criminal trade, and of an unspeakably cruel and debasing traffic, there may well be grave differences of opinion; but of one thing we feel certain, and that is, that a great end will be served by this exposure, undertaken, as we feel assured it was, with intense sincerity, and with an overruling hatred and fierce anger of practices which have too long secretly prevailed in our midst, and have too long passed unscathed by public indignation. Desperate diseases need strong remedies. A cancer such as this, which is eating away the vital morality of whole classes of society, spreading widely, ravaging the unprotected classes calls for the knife. It has been applied publicly, red-hot, and with an unsparing hand. Unsullied witnesses to the purity of domestic life—bishops, prelates, clergymen of all denominations, members of both Houses of Parliament—have openly and at once acclaimed the moral courage of those who have not hesitated to submit themselves to the most painful ordeal in order to search out the evil, and who have therein braved that form of censure which they could not but have foreseen. Such hidden cesspools of vice honeycombing the earth on which we tread, must be removed. The process is not a savory one, and the method adopted is one which must shock and give pain to many who de-

serve to be spared such suffering; but who shall say that the purifying process is not a work deserving of words of encouragement and acts of support, from those who would fain see this great city relieved from the stain of horrors such as the Pall Mall Gazette has openly exposed?

To be effective, prompt action must follow. It is for the Legislature and for the Home Office at once to deal with these revelations. Law is violated, purity and morality are outraged, by the existence of such abominations. The claim to advance the age of protection for young girls is made out to the fullest; and we see no reason why that age should not be extended, even beyond that limit which is at present demanded. But this will not suffice. Well considered measures must be taken to uproot this fearful system, by means such as those which have been brought into play to arrest gambling. Not only the law giver must act, but the full forces of the law must be brought into play; and, if they are insufficient, they must be strengthened. This is an age of leagues, and it may be hoped that a league will be formed that will wage this crusade, not only in London, but in other great towns, until it shall become as dangerous to carry on the infamous traffic which has been exposed, as it is to secretly manufacture and treasonably retail dynamite. It is a kind of treason more felonious than any other, treason against every principle which men should hold dear; conspiracy to poison the wellsprings of home life, and to dissolve the ties which favor most the sacred bonds of society.

With regard to the medical practitioners to whom reference is made as making examinations and signing certificates, we trust that their participation was entirely in ignorance of the aim of the other parties concerned. Were it otherwise, we need not say with what horror such conduct would be regarded, and how severe should be the punishment dealt. The medical profession will always be found on the side of purity; delicacy and even decency have suffered by this exposure; but horrible depths of vice have been exposed, and, once laid bare, they must be extirpated."

The Summer Diarrheas of Infants.—Dr. J. J. Mulheron, editor of the "Medical Age," writes on this important subject in the issue of July 25. His paper is abstracted by the New York Medical Journal.

The doctor treats first of the causes of these affections, dividing them into simple diarrhea, entero-colitis, and cholera infantum, and then speaks of the treatment as follows:

"The first thing necessary in undertaking the treatment of a case of 'summer complaint' is to decide to which of the three forms of intestinal disturbance above referred to the case belongs, and, having settled this point, to settle on some definite theory of its nature and the pathological conditions which obtain. Without these preliminaries the physician must flounder aimlessly about.

"The armamentarium which I would suggest in going out to cope with the summer diarrheas of infants comprises the following drugs and remedies, it being understood, of course, that the dietary shall be determined pro re nata. The drugs are mentioned at random, and are not given in the order of their importance: Castor-oil, prepared chalk, calomel, creasote, salicylic acid, opium, strychnine, vegetable astringents, ergot, belladonna, chamomile, bromide of potassium, sulphuric acid, subnitrate of bismuth, oxide of zinc, cocaine, the spice poultice, and warm and cold baths.

"A brief review of the physiological action of these may assist to their theraputic application. Castor-oil is a mild but decided purgative, and is at the same time an emollient through its action on the intestinal mucous membrane. Prepared chalk (carbonate of calcium) is an antacid. The belief that calomel is a cholagogue is now very generally discarded. The drug has, doubtless, a complex action, but for our present purpose it is sufficient to state that it is antiseptic, having specially marked anti-fermentative properties. Experiments conducted by Wassilief in Hoppe-Seyler's laboratory are quite conclusive as to its influence in preventing decomposition and butyric-acid fermentation in the intestines. Added to the cultivating fluid,

it prevents the development of micro-organisms, while it destroys the activity of those which have already formed. These properties are, probably, due to the formation of the bichloride of mercury through its union with the chlorides of the stomach. Creasote is intensely poisonous to all forms of infusoria and fungi. It allays irritative conditions of the gastic nerves and becomes thus also an excellent anti-emetic. Salicylic acid destroys low forms of organic life and ferments. Opium has a very manifold action, but for our present purpose it is sufficient to recall the fact that it is an anodyne, that it diminishes peristaltic action of the bowels, and that it checks secretion from all surfaces except that of the skin. Strychnine, besides its characteristic action on the spinal motor nerve centers, influences also such portions of the cord as affect the vaso-motor centers. Without being able to state its exact physiological action in this direction, clinical experience has demonstrated its value as a tonic in atony and relaxation, both of striated and non-striated muscular tissue. * * *

"Ergot has the peculiar property of causing vaso-motor spasm, and its action is noticeable in the non-striated muscular fiber of the intestines as in the same tissue found elsewhere. Belladonna is a stimulant to the vaso-motor centers, causing contraction of the capillaries. It checks secretion from glands. It relieves pain, Anstie regarding it as the best remedy to mitigate pain of every kind in the pelvic viscera. Chamomile, through the volatile oil which it contains, possesses the power of subduing reflex excitability. Grisan found it impossible to tetanize with strychnine a frog which had been fortified with chamomile, and, vice versa, when excitability had been produced by strychnine it could be calmed by means of chamomile oil. The power of bromide of potassium in allaying reflex excitability is well known. Subnitrate of bismuth acts, probably, locally, forming a coating over the mucous membrane and protecting it from the action of irritants. Oxide of zinc, besides being an astringent, possesses also the property of allaying reflex irritation. Sulphuric acid is tonic and astringent, with an apparently specific action on the intestines. The local anesthetic action of cocaine has been so much discussed recently as to make reference to it unnecessary. It suggests itself as an application to the irritated gums. The spice poultice is a counter-irritant, and is, probably, also antispasmodic through absorption of the oils which it contains. * *

Simple Diarrhea.—Assist the effort of nature to rid the bowel of irritant matter with a dose of castor-oil. Follow this by sufficient doses of prepared chalk to correct the acidity of the discharges, give opium to diminish the peristaltic action, and give astringents and strychnine to restore tonicity. The following is a good formula for a child of, say, eighteen months:

Tr. opii camph.	- -	℥ss
Ext. rubus villos. fl.	-	ʒj
Tr. nucis vomicæ	-	gtt. xij
Mist. cretæ		q. s. ad ℥iij.

M. Sig. A teaspoonful every three hours.

Entero-Colitis.—When the character of the stools, the elevation of temperature, the disturbance of the stomach, etc., indicate the involvement of the intestine in a catarrhal inflammation, the means employed in the simple diarrhea, which is usually the precursor of these graver symptoms, must be supplemented by other remedies. Place the child on small doses of calomel and ipecac—say a twelfth of a grain of each for a child of eighteen months—every two hours, alternated with a teaspoonful of an infusion of five chamomile flowers in a cup of boiling water. The spice poultice, moistened with hot brandy, must be laid over the abdomen. If the temperature pass 101° F., it must be reduced by baths, the water of which must at first be tepid, and gradually cooled to 70° F., or lower, as the circumstances of the case require. Should twenty-four or thirty-six hours of this treatment be followed by no betterment, and the stools continuing or becoming more colliquative, I have found the following formula to answer admirably, qui-

eting the irritability of both the stomach and the bowels:

Creasoti	- -	gtt. iv
Zinci oxidi	- -	gr. xvj
Tr. belladonnæ	-	ʒ ss
Glycerini	- -	℥ ss
Aquam	-	q. s. ad ℥ ij.

M. For a child a year old: Sig. A teaspoonful every three hours. This may be alternated with aromatic sulphuric acid, two drops in ten drops of brandy, every three hours. The spice poultice should be continued.

Cholera Infantum.—Bearing in mind our conception of this affection as a neurosis, our treatment should be directed, 'first, to destroying the organisms on which every fermentation depends for its development; secondly, to allaying the irritation of the end organs of the splanchnics in the mucous membrane; thirdly, to arresting the outward osmosis from the vessels; fourthly, to lowering the febrile temperature and removing the algid condition.' My experience leads me to speak with favor of salicylic acid and chalk, as recommended by Dr. Hutchins in the September, 1884, number of the 'Proceedings of the Medical Society of the County of Kings,' N. Y., as a remedy meeting the first and second of these indications. This combination is useful only in cases of serous diarrhea, having no efficacy in the inflammatory or lienteric form. It acts happily, also, in allaying gastric irritability. Three grains of salicylic acid, rubbed up with two grains of prepared chalk, should be given every three hours. Care should be taken that the chalk be pure, and that, during the effervescence attending the addition of water to the powder no odor of chlorine be emitted. Such odor denotes the presence of chlorine—a residuum of the manufacture of chlorinated soda. It is apt to exist in prepared chalk and should be carefully avoided. The creasote formula given above for entero-colitis has also answered a good purpose, especially in cases attended with much gastric irritability.

There are few cases of cholera infantum in which the bromide of potassium will not prove helpful, and especially when there exist restlessness, wakefulness, and twitching of the muscles. It allays the irritation of the splanchnics and of the nervous system generally.

Baths hold an important place in the treatment of the fever of cholera infantum, and for one reason among others, that it is of little use to administer medicines as long as the temperature is elevated. The soothing influence of a cold bath on a child whose temperature has reached, say 103° F., and the increased activity of the drugs administered after the bath need but to be witnessed to make converts to this much neglected remedy in the treatment of cholera infantum. The child should be immersed up to its neck in water at a temperature of 95° F., to which cold water should be added until the bath reaches 70° or even lower, the condition of the patient, his temperature, etc., being the guide to the reduction. No hard-and-fast rules can be laid down to govern the temperature of the bath or its frequency. The condition of the infant must be the guide, which the good sense of the physician must be trusted to interpret and follow.

When the child has entered the algid stage of the disease treatment offers little hope of rescue. Alcoholic stimulants and warm baths are about the best we can apply. Belladonna through its action on the heart, suggests itself as a remedy in this condition, and experience has shown it to be of value. By paralyzing the terminal inhibitory filaments of the pneumogastric, it gives the heart over to the sympathetic, and we have, as a consequence, increased rapidity of contraction and raised arterial tension—a condition of affairs which it would seem very desirable to secure in the cold stage."

Colles' Fracture.—John B. Roberts, M. D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic, writes on the practical treatment of fractures of the lower end of the radius in the Polyclinic:

The essential point in the treatment of this fracture is early and complete replacement of the lower fragment. The protracted conva-

lescence and frequent stiffness of the wrist and fingers, seen often in this injury, are, I am convinced, due to imperfect reduction of the fracture and the confinement of the fingers during the use of the fracture dressing. When there is neither comminution nor loss of tissue by crushing, the fracture can usually be cured in four to five weeks, with little or no difficulty, and without stiffness of the fingers. When comminution and crushing exist, cure without impairment of motion, though probably with more or less persistent deformity, is nearly always possible; and in the same time. When I say "cured," I do not mean that every vestige of swelling and of osseous thickening disappears so soon, but that the limb is capable of performing its ordinary functions. Old and rheumatic patients may perhaps exhibit a greater tendency than others to rigidity of the joints; but I cannot insist too strongly on my belief that stiff fingers are usually an indication of imperfect reduction of the fragments, which, by their projection, interfere with the extensor and flexor tendons, and cause adhesive inflammation.

No apparatus should be applied that restricts, at any period of the treatment, full and free motion of the fingers. In uncomplicated cases the splint need not be worn more than about ten days; provided that the patient is sufficiently intelligent to avoid submitting the arm to unexpected strains and blows. This is because of the slight tendency to reproduction of deformity in the properly reduced uncomplicated fracture. In careless patients, and in comminuted or otherwise complicated fractures, support by the splint should be continued for three weeks. I should be willing to treat many uncomplicated patients in intelligent persons without any splints, merely substituting a band of adhesive plaster firmly placed around the seat of injury. Passive motion is probably never necessary if the fracture is properly reduced, and the play of the fingers not restricted during the use of the splint.

Reduction is always painful, but is usually so quickly accomplished that I seldom use an anesthetic. Ether or nitrous oxide should be employed, however, if there is likelihood of the pain preventing perfect coaptation of parts. The surgeon must apply force directly to the fragments. Let him put the patient's hand in the prone position, grasp the middle of the forearm with one hand, and take hold of the patient's palm with the other hand in such a manner that his thumb can make strong pressure upon the apex of the dorsal prominence. By making traction on the hand of the patient, and then suddenly flexing the patient's wrist, while at the same time he presses with his thumb strongly upon the projection at the back of the wrist, he can nearly always force the lower fragment into its proper position without difficulty. A repetition of this maneuver is sometimes requisite before accurate replacement is obtained. The grating produced as the fragment, which may have been impacted, is driven into its normal position can at times be distinctly heard by bystanders. The limb at once assumes its normal contour. The disappearance of the bony edge, or shoulder, previously perceptible to the touch, where the upper margin of the lower fragment was elevated above the level of the shaft of the radius, is an indication that reduction of the backward displacement has been accomplished. Still further manipulation may occasionally be necessary to reconstruct the normal outline of the radius, which has at the wrist, it will be remembered, a concave palmar surface.

If great comminution or crushing has been incidental to the fracture, perfect restoration of shape may be impossible, although the deformity can be greatly diminished. In such cases also, retention of the fragments in good position may be somewhat difficult. Firm impaction, or entanglement of the fragments in the tendons or in dorsal periosteal bands, may require that the hand and attached lower fragment be first bent strongly backward, in order to relieve the interlocking before making traction, flexion and pressure. This preliminary measure is very seldom necessary. After reduction has been accomplished, any form of dressing is allowable, provided it immobilizes the limb, does not tend to obliterate

the normal curve of the palmar surface of the radius, and permits the patient to move his fingers. It was formerly thought that splints deflecting the hand to the ulnar side exerted traction on the radial side of the wrist, and were therefore indicated. This is incorrect teaching. Such splints are unnecessary, as the deflection only causes the carpus to roll in the articular surface of the radius.

The hand should be placed in the prone or semiprone position, and a single splint extending from the elbow joint to the middle of the metacarpus, applied either to the dorsal or palmar aspect of the forearm. It is essential that the palmar splint, if it be chosen, should be convex on its upper surface at its carpal extremity, so as to preserve the integrity of the radial concavity, and not to make the palmar surface of the radius flat by forcing upward the lower fragment, which has just been pushed down into proper position by the surgeon's manipulations. This convexity of the splint may be obtained by using the moulded splint of Levis, which I employ, or a splint with a hard convex pad, such as that of Carr. It should be seen that the pad properly fits. The surgeon can readily make a pad out of soft wood and fasten it with screws to a straight splint. No dorsal splint is needed with either the Levis or Carr palmar splint. If it is inconvenient to obtain a proper form of curved palmar splint, a flat splint may be applied to the dorsal surface of the radius, for it presents no curve, but is straight. Bond's splint, so frequently employed in Philadelphia, is dangerous to the future contour and utility of the limb, and should never be used.

After the splint has been employed for from ten to twenty days, varying, as above stated, with the kind of fracture and disposition of the patient, it is well to substitute it by a strip of adhesive plaster two inches wide, applied circularly around the wrist, so as to give moderate support to the partially consolidated fracture.

If union has already occurred in a fracture treated without proper reduction, I should be inclined to attempt refracture and adjustment, even after the lapse of several months; provided that the fingers were very rigid or the deformity very great. It is not likely that as much can be accomplished in such cases as was possible immediately after the receipt of injury; nor should it be forgotten that very good, if not perfect, use of the hand finally is compatible with a considerable degree of deformity. Rigidity of the fingers, if permitted to occur, remains, however, for many months.

A Valuable Remedy for Headache.—The Physicians and Surgeons' Investigator desires to call the attention to a simple, and at the same time wonderfully efficient, treatment for many kinds of headache.

"We lay no claims to originality, nor do we know who the originator was, but having used it for a year or more, and in many cases with remarkable results, we feel disposed to give it our indorsement, and desire to make it more generally known. The remedy is nothing more nor less than a solution of the bisulphide of carbon. A wide-mouth glass-stoppered bottle is half-filled with cotton or fine sponge and upon this two or three drams of the solution are poured. When occasion for its use occurs the mouth of the bottle is to be applied to the temple or as near as possible to the seat of pain, so closely that none of the volatile vapor may escape, and retained there four or five minutes or longer. For a minute or so nothing is felt, then comes a sense of tingling, which in a few minutes—three or four usually—becomes rather severe, but which subsides almost immediately if the bottle be removed, and any redness of the skin that may occur will also quickly subside. It may be re-applied, if necessary, several times in the day, and it generally acts like magic, giving immediate relief.

We believe this was the basis of a once popular nostrum. The class of headache to which it seems especially adapted is that which may be grouped under the broad term of "nervous." Thus neuralgic, periodic and hysterical headaches are almost invariably relieved by it. True, the relief of a mere symptom is quite another thing from the removal

of its cause, yet no one who has seen the distress and even agony caused by severe and frequently recurring headaches (and who has not?) but will rejoice to be able to afford relief in so prompt and simple a manner; besides it is sure to secure the hearty gratitude of the patient if he has suffered long. As to the modus operandi we have nothing more definite than a theory to offer, and that is that the vapor being absorbed through the skin produces a sedative effect upon the superficial nerves of the part to which it is applied. We know by experiment that its influence is not due to its power as a counter-irritant. We however know that it does act, and if we do not clearly see in what way it acts, that is no more than can be said of several other remedies which are firmly established in professional favor and confidence."

CONTRIBUTION.

GLAUCOMA: ITS DIAGNOSIS AND TREAMENT.

By W. Edwin Ground, M. D., Ph. D.
Professor of Diseases of the Eye and Ear, and Hygiene in the Toledo Medical College, Toledo, Ohio.

I write this article, not on account of the rarity of glaucoma, but of the frequency, and the unerring certainty with which it destroys vision, unless recognized and promptly subjected to judicious treatment in its incipiency. As a preface to what I have to say I will relate the following case:

Regius R——, aged 47, a harness-maker, residing on the East Side, was taken about May 1, 1885, with pain in the side of his head. He consulted his family physician, who treated him for conjunctivitis, as he had also some hyperemia of the conjunctiva. This treatment was kept up until he was referred to my clinic at the Eye and Ear Infirmary by Drs. Havighorst and Whiteford. Up to this time the pain of a periodical character, grew worse and worse until it was almost unbearable. In fact, the suffering was to the patient the whole disease. When presented to me June 10, '85, I found the left eye much the worse, the glaucomatous disease having progressed so far as the symptoms I describe later on as glaucoma absolutum. In this eye was only a perception of light and the ball stony hard. The right eye was not so far advanced; the vision was reduced to counting fingers at 4 feet, pupil dilated and tension + 3. Ophthalmoscopic view showed a deep cupping of the optic disk, arterial pulsation, etc. As the last resort I recommended iridectomy, not that I anticipated anything beyond the relief from pain.

The patient was consequently admitted to the Union Street Protestant Hospital. The next day I performed a double iridectomy under chloroform. The iris of the left eye was so atrophied that it was difficult to prevent tearing it.

The operation resulted in the partial relief of pain and a restoration of practically normal vision in the right eye. The left eye being worthless, I recommended enucleation. Now, that the above resulted from the profound ignorance of his family physician, I do not hesitate to say.

The operation had a decided curative result on the right eye, and it is reasonable to suppose if taken at the same or an earlier stage in the left the result would have been as decidedly beneficial. A great many physicians seem to think that unless they are experts with the ophthalmoscope they cannot diagnosticate eye diseases. Glaucoma may almost invariably be made out without the aid of that instrument. In senile subjects it may be mistaken for cataract. No very great tact is necessary to make the distinction without the eye mirror. Careful and repeated tests of tension, size and activity of the pupil, the absence of definable opacities of the lens, and above all, trials of visual acuity and the integrity of the field will settle the question. Simple cataract runs its entire course without pain, while in glaucoma pain of a periodical nature is a most marked symptom. It very frequently happens that the vitreous is so turbid that an ophthalmoscopic view cannot be had of the fundus.

De Wecker defines glaucoma as "the expression of a disturbance of equilibrium between secretion and excretion, with increase in the contents of the eye and increased tension." Just what causes or determines these phenomena is yet a matter of speculation. Donders thinks it a neurosis and devoid of inflammation. Others assume to have found traces of inflammation in the uveal tract and optic nerve, and that this constituted the formative stage antedating the increased tension. Then again, increase in size of the lens, swelling of the ciliary processes, and diminution of the marginal space between the two have been considered the first step in this disease. It is generally conceded that in

most cases of glaucoma there is compression of the angle of the anterior chamber, by a drawing forward and adhesion of the outer rim of the iris to the trabeculæ of the canal of Fontana, thus checking the current of intra-ocular fluids towards the canal of Schlemm. Whether this is primary and causal, or secondary, is still a disputed point.

One thing is agreed upon by all, and that is the efficiency of an iridectomy in relieving the manifestations of the disease if taken in time. Just how an iridectomy or sclerotomy permanently relieves this fatal pressure is as little understood now as in the time of Von Graefe.

By most authorities glaucoma is divided into simple, acute, chronic, secondary and hemorrhagic.

Acute glaucoma is of an inflammatory nature, and excessively painful, destroying vision in a few hours or days. Owing to the cloudiness of the vitreous, the turbidity of the aqueous and the altered condition of the corneal epithelium, the fundus can rarely be seen by the ophthalmoscope. Episcleral congestion, chemosis, puffiness of the lids, excruciating pains in the eye, circumorbital region and head, with perhaps nausea and vomiting, make up an extremely agonizing picture. The ball is intensely hard and the cornea insensible to light touches. An anesthetic condition of the cornea is, in a greater or less degree, present in all forms of glaucoma, and is due to paralysis of the corneal nerves from pressure. Sometimes acute glaucoma is preceded for weeks or months by prodromic symptoms, such as temporary blurring of vision and some vague feeling of discomfort or actual pain. These insignificant symptoms intermit but come oftener, last longer, and leave the sight each time worse than before, until at last it ends in a destructive attack.

Simple glaucoma. This variety is noted for its gradual insidious course, unattended by pain or inflammation, and very frequently escapes detection till the sight of one or both eyes is much impaired. The patient notices that his glasses are less and less serviceable to him, having to change them often, which seems to benefit him for a time, and finally he is compelled to get a stronger pair. In addition to a gradual failure of the power of accommodation, the patient notices a colored halo around the lamp's flame at night, and the vision becomes smoky, due to the cloudiness of the vitreous, which fluctuates but gradually increases. As the vision becomes greatly reduced the pupil will be unduly large and not readily responding to light. The tension increases, the anterior chamber is shallow and the visual field somewhat contracted.

The increased pressure of the accumulating fluids in the eye, owing to the yielding of the optic nerve entrance, produces the characteristic cupping of the optic disk. The excavation usually involves the entire disk. The edges being very abrupt, gives the appearance to the arterial twigs passing over it as though broken or ending abruptly in the retinal tissue. In the healthy eye pulsation of the retinal arteries is never visible, but in glaucoma it is frequently observed, and may be produced at will by slight pressure with the finger on the ball from without. A swelling and falling of the veins may be noticed in the healthy eye synchronous with the heart beat. The damage to sight is due to the paralyzing effect of undue pressure on the conducting fibers of the optic nerve, their sudden flexure in the pit, and the impaired retinal blood supply.

Chronic glaucoma presents a picture of the ultimate stage of glaucoma simplex. Great fullness and tortuosity of the principal branches of the vessels of the ciliary region and the abrupt way in which they spring from the sclera is characteristic of this variety. The advanced stages of all the varieties, when sight is extinguished, the ball stony hard, the pupil widely dilated, the iris atrophied and reduced to a narrow rim, the sclera of a grayish leaden color with large loops of tortuous veins, loss of sensibility of the cornea and not infrequently cataract, are called absolute glaucoma.

Hemorrhagic glaucoma is characterized by effusions of blood in the retina, optic nerve, and sometimes the vitreous. Generally no preliminary signs of glaucoma have occurred. An examination reveals increased tension and turbid media, and if the fundus be visible the ophthalmoscope shows patches of extravasation more or less extensive. One eye alone is usually affected, and the other free. These symptoms are frequently forerunners of a most pernicious and unmanageable form of glaucoma.

Secondary or Consecutive Glaucoma.—By this is meant augmented intra-ocular tension resulting from some other recognizable disease such as ulcerations of the cornea where staphyloma appears; after wounds with incarceration of the iris; after complete posterior synechia (occlusion of the pupil); after operations for cataract with a membrane filling the pupil; after dislocation of the lens into the anterior chamber, or into the vitreous. It also follows upon the growth of intra-ocular

tumors. Serous iridochoroiditis is very apt to lead to secondary glaucoma. The conditions called buphthalmus and hydrophthalmus which may or may not be congenital, are specimens of secondary glaucoma.

Treatment.—Until the discovery of the efficiency of iridectomy by Graefe, but one sad fate awaited every case, that of hopeless blindness. We know as little at the present day respecting the modus operandi of this operation as we do concerning the immediate cause of the increased pressure. But that iridectomy possesses a decided curative effect is an undisputed fact. The earlier iridectomy is practiced, the greater is the certainty of saving useful sight; hence the immense importance of every physician being able to make a diagnosis promptly, and thus avoid delay. The incision should be made with a Graefe cataract knife. As the anterior chamber is generally very shallow, the point of the knife should be closely watched as it passes through the aqueous humor in front of the iris. On completing the section if the iris proplapses, it may be seized by a fine toothed forceps and drawn well out and held steadily by an assistant till cut off with scissors close to the sclera. Two snips are required, beginning at one end of the incision and finishing at the other in order to excise a broad portion of the iris, reaching quite to its attachment. If the escape of the aqueous does not protrude the iris, forceps should be carefully passed into the anterior chamber and the iris seized and drawn out. After the completion of the operation the eye should be instantly shut and gentle compression made to avoid, intra-ocular hemorrhage. Care should be taken that none of the iris remains in the lips of the wound. The eye should be lightly bandaged, and the patient put to bed for a few days. Chloroform is generally necessary in iridectomy. In order to procure the best results in acute glaucoma this operation should be performed within the first few days. The longer it is delayed the less the prospect for success. In chronic glaucoma it is of very little consequence except to lessen pain. In secondary glaucoma, in addition to removing the cause, an iridectomy will frequently prove beneficial. This operation should never be risked in hemorrhagic glaucoma, as profuse intra-ocular hemorrhage would occur. In confirmed glaucoma enuncleation is the safest and surest relief from suffering. Sclerotomy is an operation highly endorsed by some, and I am inclined to think it will ultimately supersede iridectomy. Still we need more experience with it to enable an intelligent opinion to be formed. Eserine and pilocarpine, in addition to their power to contract the pupil,have also a tendency to lessen the tension of the eyeball. This diminution of tension is generally temporary; however, in rare cases it seems to exert a lasting effect. I have carefully tested cocaine, and I must say I have never discovered any tendency to diminish intra-ocular pressure. In closing I would warn against the use of atropine where glaucomatous symptoms exist, and I think the same (from my experience) may be said of cocaine.

145 Summit street, Toledo, O.

SOCIETY PROCEEDINGS.

CHICAGO MEDICAL SOCIETY.

REPORTED OFFICIALLY FOR THE REVIEW.

Stated meeting, August 3rd, 1885, President, Charles T. Parkes, M. D., in the chair.

Oleate of Manganese.

Dr. Franklin H. Martin read a paper on the "Oleate of Manganese." He said: There is little doubt left in the minds of therapeutists in regard to the value of manganese as a remedy in certain forms of menstrual trouble. The remedy, in the form of permanganate of potash, was first brought to the attention of the profession by Ringer and Murrell, of London, in the spring of 1883. They recommended the drug in functional amenorrhea. Soon after this he commenced experiments with the same preparations, and published the results in the New York Medical Record, Sept. 29, 1883. To his knowledge, that was the first time that anything on the subject was published in this country.

In the course of his experiments, acting on the theory that the drug produced menstruation by stimulating the menstrual organs, he was induced to give the remedy in menorrhagia and metrorrhagia dependent upon an atonic condition of the organ. He found to his gratification that it acted equally well in these conditions, as in the opposite. He has also obtained good results from its administration in irregularities incident to approaching menopause. He has received very gratifying letters from many members of the profession throughout the country, who have used the drug in one or more of the conditions mentioned above, with good results.

Dr. Thomas, of New York, says of the

remedy: "I think it is the best emmenagogue which has yet been discovered.

Dr. Roberts Bartholow not only recognizes its power as a remedial agent in amenorrhea, but also considers it a general stimulant, making it equally efficacious in other menstrual difficulties dependent upon an atonic condition.

After publishing his second report on this subject, the author received a letter from Sydney Ringer, of London, in which he expressed his gratification at the result of his experiments, and in which he said:

"Like you, I have found the permanganate most useful in atonic conditions," and further remarked, "I was quite prepared to learn that the permanganate is useful in menorrhagia."

Since there is no longer any doubt about the great value of this drug in the distressing menstrual difficulties, the next formidable problem for the therapeutist to solve is, How shall it be administered? The permanganate of potash, the original preparation used for experiments and administration, in any form is liable to act as an irritant to the stomach. It has in many ingenious ways been made into pills, but as these pills must of necessity have for their basis kaolin, or some other inorganic substance, the drug in this form is not satisfactorily absorbed. The compound tablets of Wyeth & Brothers and other druggists are objectionable, in many cases of irritable stomach, because the irritating undiluted drug comes in direct contact with its mucous membrane. On account of the many difficulties of administration, therefore, this valuable remedy has not met with the reception that is its due. Following the suggestion of Dr. Lewis L. McArthur, of this city, he succeeded in having an oleate of manganese prepared. This oleate was made for him by Edward Kreyssler, of the firm of Forsyth & Schmid, of Chicago. He says he is indebted to Mr. Kreyssler for the following statement of the mode of preparation and of the physical and chemical properties of the oleate of manganese: A solution of sulphate of manganese was made in distilled water and to it a solution of sodium oleate was added. On mixing these two solutions gradually and with constant stirring, a precipitate of oleate of manganese resulted. This precipitate, upon heating, changed to a putty-like mass. This was washed several times with warm distilled water, to remove the sodium sulphate, and the resulting mass was the pure oleate of manganese. It is of a light-gray color, having a pinkish hue, of a sweet musty taste and peculiar clay-like odor. It is sparingly soluble in alcohol, soluble in ether, chloroform, olive oil and oleic acid.

The Method of Application.—He recommends that one dram of a twenty-per cent. solution of the oleate of manganese in oleic acid be applied to the abdomen of the patient, and its absorption promoted by friction with the hand.

In amenorrhea it should be applied, if possible, every night for a week preceding the expected menstrual period, or at the time menstruation is due, and until it makes its appearance. In menorrhagia or metrorrhagia it should be applied in smaller quantities, every night until the desired effect is produced.

Of about a dozen cases in which the oleate has been prescribed by him, but four had reported. The success in these four was all that could be wished. Three of the four were cases of atonic amenorrhea, the fourth, irregularity due to approaching menopause.

In the discussion Dr. Etheridge thought much advance would be made in the use of drugs if we would be more careful to discover in what condition they were beneficial. He had found this remedy useful in cases of atonic amenorrhea, with the uterus in its normal condition. He had found the aqueous solution an eligible preparation, and had also used it in the form of a suppository.

Dr. E. J. Doering said he had used this remedy in some cases of atonic amenorrhea with good results. He asked the effect of the drug upon the pregnant uterus.

Dr. Paoli had used manganese somewhat for several years, in cases of menstrual disorder, with varying degrees of success. It was a useful remedy in many skin diseases. He had not used the oleate, and could not see how it acted upon the uterus, unless, possibly, by being applied at once after being freshly prepared.

Dr. Martin closed the discussion by saying he had used the aqueous solution in very small doses, also had had the remedy put in dry papers and swallowed with a glass of water. He had never used it in the form of a suppository. Manganese has no effect on the pregnant uterus. The drug seems to act as a general stimulant to the uterus, causing it to perform its normal function. It might be absorbed as the oleate, and so produce its effects.

"Does the use of Tobacco Injure the Sight?" was the subject of a paper read by W. Franklin Coleman, M. D. The question was answered in the affirmative by the author.

In the discussion Dr. Paoli said that while the excessive indulgence in tobacco might be

harmful, the fact of its almost universal use and continued use in many cases for years, resulting in no deleterious effect, would seem to show that its narcotic power, used in the ordinary way, was very slight. He had used tobacco for fifty-five years and felt no ill results. The Germans use large quantities of it, and do not suffer. This seemed to be a case of excess of zeal on the part of the ophthalmologists to discover a cause for amaurosis. We ought to be conservative on this point.

Dr. Coleman closed by saying that only in certain susceptible conditions was tobacco liable to cause disorders of vision; but that so few suffered was no proof that it had not this baneful influence when acting with other causes.

Laceration of the Cervix Uteri.

Dr. John Bartlett read a paper in which he said his object in addressing the Society was to suggest a way and a time in which laceration of the cervix uteri may be easily and certainly detected soon after its occurrence.

Directly after delivery, if the fingers be introduced deeply into the vagina up to the contracted os uteri internum, and then carried in any direction a little outwardly, the flabby and floating ring formed by the non-contracted cervix may be felt, as Guillemeau described it three hundred years ago, "like a section of large intestine."

By very carefully following the entire circumference of this ring an existing rent may be discovered. But this examination is attended with some difficulties. The patient is exhausted with her labor, and fatigued with attentions, and just now, since "it is all over," longing for rest. She is impatient of, and perturbed by, this post festum inquiry. Her state of mind, and possible expression of complaint, are apt to render an examination, which the physicians cannot regard as absolutely necessary, less exact and thorough than it would be otherwise. And then, the soft and floating margins of the cervix have often somewhat of an intangible feel, if the expression be permitted, gliding past the fingers like a detached clot of blood,and occasionally, in some portion of their circumference, passing out of satisfactory reach.

On this account it is not surprising to hear an obstetrician say that he can not tell whether the post-partum cervix is lacerated or not. The error of the accoucheurs who fail to recognize such a condition is, that they do not make their observation of the suspected cervix at the proper time. They examine the neck actually, as has just been done mentally —after the clearance of the uterus. The favorable moment for the examination—and that he said was the special point of his remarks—is just as the placenta is beginnig to occupy and distend the cervix. The collar of flesh is then not floating and uncertain in feel, but stretched and expanded, forming a distinct ring, easily followed in its entire circumference. At this moment, then, just as the cervical tube is being rendered tense by the placentar mass, any laceration in it may be detected with ease and certainty.

Dr. Etheridge asked the author of the paper whether he had verified a case by speculum examination after discovering it in the way he had illustrated in his remarks.

Dr. Parkes said he had great difficulty in detecting laceration after delivery, on account of the relaxed condition of the parts. He thought the suggestion of Dr. Bartlett as to the way to obviate this difficulty was a good one.

Dr. Doering inquired as to the size of lacerations he had found.

Dr. Bartlett concluded by saying that he had verified cases of laceration discovered in the manner proposed by him. The largest laceration he had found was one and-a-half inches in length, and the end of the little finger could be passed into it. In one case he encountered considerable hemorrhage from such a rent, and this may be the cause of continuous loss of blood when the os is well contracted.

Dr. Bartlett illustrated his remarks with earthenware models, turned by a potter, under his immediate direction.

Society then adjourned.

SELECTION.

ADDRESS IN THERAPEUTICS.

Read at the Cardiff Meeting of the British Medical Association, and published in the Journal.

BY W. ROBERTS, M. D., F. R. C. P., F. R. S.,
Consulting Physician to the Manchester Royal Infirmary
Professor of Medicine in the Victoria University.

On Feeding the Sick.

Mr. President and Gentlemen:—The subject of therapeutics is so large and complex, that to deal with it comprehensively within the compass of an hour's address would be beyond my powers. Such an at-

tempt, even in much abler hands than mine, could scarcely issue otherwise than in the enunciation of a series of barren generalities which would edify no one. I therefore felt, as soon as I came to consider the matter, that the most prudent course for me, and the one most likely to prove interesting to you, was to confine myself to a very limited area in the field of therapeutics, and to endeavor, within that area, to say something which might prove of use in the daily practice of your profession.

Perhaps, of all the many duties which fall to the province of the medical practitioner, there is none so common as the duty of regulating the diet of his patients. Whatever the disease may be from which the patient is suffering, and whatever special means may be indicated for his relief, the regulation of the diet is sure, sooner or later, to crop up as an integral part of the management of the case. Dietetics, therefore, cover more ground than any other branch of the healing art—they are also, perhaps, the most ancient branch. Hippocrates traces back the very origin of medicine to dietetics. "For," he says, "the art of medicine would not have been invented at first, nor would it have been made a subject of investigation, if, when men are indisposed, the same food, and other articles of regimen which they eat and drink when in good health, were proper for them, and if no others were preferable to these." Notwithstanding this universal applicability, and this high antiquity, it must, I think, be allowed that dietetics, except in a few special cases, are somewhat neglected in these days. The often contradictory advice which is tendered to invalids in regard to their diet by the several medical men whom they may consult, betrays the want of a guiding principle, and of a general consensus of opinion in the medical profession on the subject of feeding the sick. This is, perhaps, not to be wondered at when it is considered how little systematic study is devoted to dietetics, and how fragmentary is the instruction on this subject which is given to the student of medicine. So far as I know there is no systematic teaching of dietetics, even on the most limited scale, afforded to the student at any of our medical schools. He is left to pick up his knowledge of this subject as best he may during the earlier years of his practice; and he often ends by taking his own digestive organs as his type, and prescribes for his patients according to the likings and dislikings of his own stomach. This is, I need hardly say, a very unsatisfactory proceeding; for there is, perhaps, no subject in which individual experience is so fallacious a guide as dietetics, and none in regard to which it is more important to draw our induction from a wide basis of facts.

The first pre-requisite for the acquisition of a sound knowledge of the dietetics of the sick, is to have clear ideas on the origin and meaning of the dietetic customs of the healthy; for it is obvious that the proper diet for the sick must be some purposive modification of the diet of the healthy. We have, perhaps, been too much inclined to seek, or to seek too exclusively, in the physiology of digestion and nutrition for our guiding principles and our point of departure in the study of dietetics. I doubt whether this is always, or even generally, the best starting-point. There are problems in human dietetics which appear to be beyond the reach of physiological research. What conceivable physiological inquiry, for example, could throw light on such problems as the following? What are the remote effects of the use or disuse of meat, or of alcoholic beverages, or of tea and coffee, on the bodily health and mental attributes of the individual, and on those of his descendants in succeeding generations? And such questions are certainly, as I believe, involved in a comprehensive study of dietetics. On the side of natural history it seems possible to approach such questions with some hope of success. For if we had the information, and could compare the mental and physical condition of the classes and nations which use these articles systematically with that of the classes and nations which abstain from them, the elements of a solution would seem to offer themselves.

I venture, therefore, to say that the science of dietetics must be mainly based and built up on an observation and study of the practices and customs of mankind in regard to their eating and drinking, rather than on any a priori data supplied by physiology. In the case of the lower animals we assume that each creature selects from the nutrient materials within its reach those articles which are most suited to its well-being, and are best fitted to promote its success in the struggle for existence, and that it is guided in this selection by an almost unerring instinct. This, like other instincts, is now explained by biologists as consisting essentially in an inherited experience, which has been gradually accumulated through a long line of ancestors and is transmitted by heredity to the descendants. Accordingly, when we see an animal feeding on a particular kind of food we conclude, without hesitation, that the food is, of all the nutrient materials accessible to it, the best adapted for the special wants of its econ-

omy. But we know that man, in regard to his bodily functions, is subject to the same laws as govern the life of the lower animals; and we cannot doubt that, in the formation of his dietetic habits, man is guided by the same kind of instincts as those which guide the rest of the animal creation in the choice of their food.

The generalized food-customs of mankind are therefore not to be viewed as random practices adopted to please the palate, or to gratify an idle or vicious appetite. These customs must be regarded as the outcome of profound instincts, which correspond to important wants of the human economy. They are the fruit of a colossal experience accumulated by countless millions of men in successive generations. They have the same weight and significance as other kindred facts of natural history and are fitted to yield to observation and study lessons of the highest scientific and practical value.

In taking dietetic customs as objects of study it is obvious that widely disseminated customs, followed by many races and by vast masses of population, have a deeper and broader significance than customs limited to a few races or to small communities. It is also obvious that the practice of the more successful races, and of the easier classes of a nation are more likely to yield good dietetic models than the practices of backward races or of the poorer classes; because the former, owing to their ampler means, have greater freedom of choice, and because also their greater success in the struggle for predominance is prima facie evidence of the beneficial tendency of their food-habits. I need hardly say that dietetic customs which are not the outcome of the free choice of the population, but are the consequence of legislative enactments or of religious injunctions, are of no utility as guides in the study of dietetics —except, indeed, as warnings of the mischief that may accrue from ignorant meddling.

The British races and the other races of Western Europe, together with their kindred and descendants in different parts of the globe, are, on the grounds stated, fitted to supply us with a body of dietetic customs which may be regarded as a beneficial model. These races and nations are every way, but especially in intellectual power and in their productiveness of men of originality and eminence, far in advance of all others. Their food-customs have grown up spontaneously, without material interference from legislator or religious reformer. Their world-wide commerce has brought cheaply to their doors the products of every land and every clime, and has enabled them to exercise a greater freedom of selection than has been possible to any other races.

The salient characteristics of the diet of the Western nations may be expressed in a few words. It consists partly of cereal and leguminous and other farinaceous articles, and of green vegetables and fruits, and partly of the various forms of animal flesh. The systematic use of alcoholic beverages is universal among them; and they consume, in large quantities, tea, coffee, or cocoa, or all three.

It is important to remark that the main dietetic customs of a country grow up and are established for the benefit of the robust and healthy, of the sober and temperate, and those of mean or average constitution; in other words, for those who are bearing the burden of the day and fighting the battle of life. These form the great mass and bulk of the adult population, upon whose bodily and mental efficacy national progress and ascendancy depend. A good many individuals, and even entire families, may not find these customs, in certain particulars, beneficial to their exceptional tendencies or weaknesses; they may even find in them a source of destruction to their health and life; but here, as elsewhere, and indeed universally in Nature's operations, the individual is sacrificed to the welfare of the community:

> So careful of the type she seems,
> So careless of the single life.

Alongside the main dietetic habits formed for the operative mass of the community, there are secondary habits formed for the use of infants and children, and for persons advanced in years.

With regard to infants and children, we observe that they are not allowed to partake of the accessory articles of food which form so conspicuous a part of the dietary of their elders. They are allowed neither the use of alcoholic beverages, nor of tea and coffee—except gradually as they draw towards adult age—but are fed on simple nutrients, milk, cooked cereals, and more or less meat.

With advancing years, the diet undergoes a certain modification; the consumption of meat is, I think, somewhat lessened, and the consumption of soups, milk, and cooked cereals proportionally increased. With regard to alcohol, this modification of diet seems to vary with the preceding practice of the individual. Persons who have been in the habit during their prime of taking a full allowance of stimulants gradually diminish the proportion as age creeps on, and their nutritive processes

decline in elasticity and power. Sometimes the indications of this natural tendency are neglected or resisted by the unwary; they imagine that the quantity of stimulants they tolerated with impunity during the vigor of manhood cannot hurt them in later life. This is a serious mistake, the commission of which tends to accelerate senile decay, and to provoke fatally tending organic changes in the large organs of the body and in the arterial system. On the other hand, persons who, during their youth and prime, have only used alcohol occasionally, or have abstained entirely from it, find advantage in their declining years in a more systematic use of alcoholic beverages.

There is a clear difference, also, to be discerned in the dietetic habits of the two sexes. There are no available statistical data to go upon, but, from common observation, we cannot fail to note that men eat much more meat than women. Probably we should not err in estimating that two-thirds of the meat brought to the market is eaten by men, and only one-third by women. In regard to alcohol, the contrast is still more marked. My impression is that, in this country, three-fourths, if not four-fifths, of the alcohol consumed is consumed by men, and only one-fourth or one-fifth by women. This difference is consonant with our experience as medical men that women are more sensitive to the effects of alcohol than men, and are more easily injured by the excessive use of it. On the other hand, the consumption of tea and coffee, but especially of tea, is markedly more abundant among women than men. The comparison is completed when we add that women consume, in proportion to the totality of their food, more milk and more bread than men do.

It would not appear to be a wise proceeding to depart capriciously, and without clear reason, from the general dietetic customs of the country. We may be quite sure that the use of meat, and of alcoholic beverages, and of tea and coffee, subserve some useful purposes to the human economy, though we, in our ignorance, may not be able to specify them with precision. These customs are the spontaneous outcrop of natural instincts, and the fruit of an immense experience, and the sanction they derive therefrom constitutes an incomparably higher authority than the opinion of the wisest amongst us.

Nevertheless, differences of constitution and personal idiosyncrasies have to be reckoned with; and there are frequently solid, indeed paramount, reasons why individuals should, in some particular or other, depart from the general dietetic plan. I have known a few natural-born vegetarians who have had a lifelong distaste for meat. Some persons are intolerant of tea, others are intolerant of coffee. It is, however, with respect to alcohol that the most important deviations from the mean type of constitution occur. Some persons are made uncomfortable by the most sparing use of alcoholic beverages, either through their life or at some epoch of it. A good many, also, are wanting in that self-control which is necessary to the salutary use of this stimulant. These peculiarities or idiosyncrasies must be attended to. It may be regarded as certain, as a very general rule at least, that any food or food-accessory, the use of which is followed by a sense of discomfort, is not beneficial to that individual. Persons who are unable to take alcohol in moderation should, on pain of loss of health and life, refrain from its use— for to them it is easier to abstain than to be abstemious.

These general considerations, as furnishing the natural ground-work of dietetics, should be kept steadily in mind in dealing with the practical questions which arise in feeding the sick. We may distinguish, in a rough sort of way, the patients who seek our aid in the matter of diet into two classes—namely, first, those who are able to take and to digest solid food, and to conform in the main with the general dietetic habits of healthy people; and, secondly, those more seriously sick, who can take little or no solid food, and must be fed on a plan deviating widely from the common custom.

Feeding the Sick with Solid Food.

The great majority of our patients belong to the former class, and are able to use the ordinary diet. They consist of invalids who are suffering from various ailments of the slighter sort, or from some more serious disease which does not interfere radically with the digestive functions. In regard to all these, I take it that (except in special cases which I do not propose to consider) it is a sound canon of practice to adhere to the main features of the current dietetic habits, and to avoid teasing our patients with irksome and needless restrictions for which we cannot give a clear reason. Diversity and variableness are marked characteristics of the dietary of the leading races of mankind, especially among the easier and more successful classes. The multifariousness of our eating and drinking is something very remarkable; and contrasts strongly with the monotonous fare of the less advanced races, and of the lower animals. Scarcely any two of our meals are exactly

alike. Not only do the several daily meals—breakfast, dinner, etc.—differ from each other, but the breakfast or dinner of one day usually differs more or less from the corresponding meal of another day. This variableness or diversity, we cannot doubt, fulfills some useful purpose beyond the mere gratification of the palate. It may therefore be inferred, that to prescribe a monotonous regimen is to contravene a beneficial rule, and to depart from a salutary principle in human dietetics. We know that a healthy man soon rebels against a daily repetition of the same dishes, however wholesome and savory; much more an invalid, with weak appetite and feeble enjoyment of his meals, who craves for more change and variety than the robust.

Another part of our duty is to study the peculiarities and idiosyncrasies of the invalid's stomach. Our stomachs are nearly as individual as our faces, and are very peremptory in regard to their likings and dislikings. In adapting diet to these idiosyncrasies, it is, however, a good rule, as far as practicable to lessen the quantity of the offending articles rather than to forbid them altogether; or, if they must be forbidden, to provide in their places substitutes of kindred nature. The practice of forbidding fresh vegetables and fruit is especially open to objection. These articles, in addition to their use in promoting the peristaltic action of the intestine, have important antiscorbutic virtues; and although in these days, and among our own people, we almost never meet with fully developed scurvy, we are probably, without knowing it, often in the presence of incipient or larval scurvy. As there is a pre-arthritic stage of gout—a dietetic disease at the opposite pole of the feeding scale—so likewise, we may presume, there is a pre-hemorrhagic stage of scurvy. I have sometimes observed the existence of a low standard of health, without any very definite symptoms, which I could only attribute to a too protracted abstinence from fresh vegetables and fruit. I think it is possible to go too far in humoring a capricious stomach; and that in persons of a hysterical or neurotic constitution, a too indulgent consideration for the ease of this organ may entail disadvantages in regard to the general nutrition of the body, and produce effects which, in the long run, tend to lower the level of health, and even to aggravate that gastric sensitiveness which we are seeking to abate.

I need hardly say that due mastication and cooking of the food are essential to easy digestion. Perfect cooking is especially important in regard to farinaceous articles and fresh vegetables. These are often imperfectly cooked, and thereby rendered difficult of digestion by invalids. The bad reputation of potatoes and pastry in regard to digestibility is chiefly due to the fact that they are often imperfectly cooked.

A matter of considerable interest and importance is the regulation of the accessories which we use with our food. The chief of these are the various kinds of alcoholic beverages, and tea, coffee and cocoa. These articles are usually taken with meals, and they mingle in the mouth and stomach with the food, and thereby directly complicate the task of the digestive organs. In the course of last year, I subjected the effects of these accessories on salivary and peptic digestion to a somewhat extended experimental inquiry. The time at my disposal will not permit me to lay before you the details of these experiments; but, as they will be shortly published, I may ask you to take them for the present on trust, and to allow me to indicate some of the conclusions and lessons which appear to be derivable from the inquiry.

In studying the influence of our food accessories on digestion, it is necessary to distinguish sharply between their action on the chemical processes, and their action on glandular and muscular activity. These two actions are quite distinct, and generally opposed to each other; for, while all the food accessories were found to exercise a more or less retarding influence on the speed of the chemical process, some, if not all of them, exercise a stimulating influence on the glands which secrete the digestive juices, and on the muscular contractions of the stomach. It is also necessary to distinguish between the effects of the food-accessory on salivary digestion, and their effects on peptic digestion, inasmuch as wide divergencies were found to exist in this respect.

The distilled spirits—brandy, whisky and gin—were found to have but a trifling retarding effect on the digestive processes whether salivary or peptic, in the proportions in which they are commonly used dietetically. Their obstructive effects only become apparent when used in quantities which approached intemperance. Taking this in conjunction with the stimulating action which they exercise on the glands which secrete the digestive juices, and on the muscular activity of the stomach, their effect in these moderate dietetic proportions must be regarded as distinctly promotive of digestion.

Wines and malt liquors exhibited an action

differing considerably from that of ardent spirits. Wines were found to be highly inimical to salivary digestion. Even very small quantities of sherry, claret, hock, or champagne, inhibited the action of saliva on starch to a very high degree. This is due to the considerable acidity which all wines possess. When this acidity was neutralized by the addition of an alkaline, the inhibitory effect of wines on starch-digestion was entirely removed, It is a common practice, as you know, to mix wines—especially sherry, claret and hock—with soda, seltzer, or some other effervescent table water. These waters all contain a charge of alkaline carbonate, and it was found that, when wines were thus mixed, they ceased to embarrass salivary action. This practice may, therefore, be looked on as highly commendable in the case of persons of weak digestions.

On peptic digestion, wines exhibited a retarding effect altogether out of proportion to the alcohol contained in them. Both the stronger and the lighter wines, except in very moderate proportions, checked the speed of peptic digestion. In the customary dietetic use of wines with meals there is, probably, a double action; on the one hand, a stimulating action on the secretion of gastric juice, and on the muscular contractions of the stomach; and, on the other hand, a retarding effect on the speed of the chemical process. In the case of persons of weak digestion, wines should be taken sparingly, and the quantity so adjusted as to bring out their stimulating action without provoking the retarding effects which follow their more liberal use. Champagne was found to have a distinctly less retarding power than an equal volume of claret or hock. This I judged to be solely due to the mechanical effects of the effervescence and liberation of gas, whereby a more efficient stirring up of the digesting mass would be effectuated. Effervescent wines, therefore, other things being equal, favor the speed of peptic digestion more than still wines.

The effects of tea, coffee and cocoa exhibited some interesting diversity. It was found that tea had an intense inhibitory effect on salivary digestion; even in very minute proportion, it completely paralyzed the action of saliva. On the other hand, coffee and cocoa had only slight effect on salivary digestion. The inhibitory action of tea on saliva was found to be due to the large quantity of tannin contained in the tea-leaf. Some persons have supposed that by infusing tea for a very brief period—two or three minutes, the passage of tannin into the beverage could be avoided. This, however, is a delusion. Tannin is one of the most soluble substances known; it melts like sugar in hot water. One gentleman of my acquaintance, in his horror of tannin, was in the habit of preparing his tea by placing the dry leaves on a paper filter, and simply pouring on the boiling water. In this way, he thought to evade the presence of tannin in his tea. But if you try the experiment, and allow the product, as it runs through the filter, to fall into a solution of perchloride of iron, you will find that an intense inky-black coloration is produced, showing that tannin has come through in abundance. You can no more have tea without tannin than you can have wine without alcohol; and I found, experimentally, that tea infused for two minutes had almost exactly the same inhibitory effect on digestion as tea infused for twenty or thirty minutes. If you wish to mitigate the effects of tea on salivary digestion, you should direct the patient not to sip the beverage with the meal, but to eat first and drink afterwards. In this way, time is given for the saliva to perform its functions unhindered. Another device is to introduce a pinch of carbonate of soda into the tea-pot; this removes the deterrent effect of tea on salivary digestion; it is a practice occasionally followed in some households, under the idea that soda helps to extract the virtues of the tea-leaves. It was found that the addition of so small a proportion as one per cent of the weight of the dry tea greatly mitigated its injurious effect on starch digestion, and that twice this quantity (two per cent) almost entirely removed it. This latter proportion corresponds roughly to ten grains of bicarbonate of soda to an ounce of tea-leaf.

The effects of tea, coffee and cocoa on peptic digestion were found to be as nearly as possible alike for infusions of equal strength. All three exercised a retarding effect, when their proportion in the digesting mixture rose above 20 per cent. These beverages should, therefore, be taken very moderately by persons of weak digestion. The good reputation of cocoa in regard to digestion seems to be wholly due to the fact that it is used in weaker infusions than tea and coffee. The directions for the preparation of this beverage, printed on the packets of cocoa sold in the shops, indicate a strength of about two per cent; whereas a medium tea is usually made of a strength of four to five per cent, and a medium coffee of a strength of five to seven per cent. The strong coffee which it is customary to hand round after dinner must have a powerful retarding effect on gastric digestion; and, although this practice may be salu-

tary to robust eaters, it is not to be recommended to those of feeble peptic power.

[TO BE CONTINUED.]

CORRESPONDENCE.

LONDON LETTER.

LONDON, August 5, 1885.

Editor Review: Here we are in midsummer and London is as hot and empty as any one could reasonably wish it to be. As usual the medical profession share in the general exodus, and all who could manage it have gone away. Some combining science with pleasure have betaken themselves to Cardiff, where the Annual Meeting of the British Medical Association is being held, though many no doubt have fought shy of going such a great distance.

The British Medical Association, which by the way is much more numerously supported, and, as a rule, acts entirely in harmony with the profession, than the corresponding American Medical Association, to judge from recent events, has been so prosperous of late years that it has accumulated a sum of over £20,000, and now the question has arisen as to what should be done with it. At the opening meeting the Council proposed that steps be taken to secure a good site and erect buildings thereon for the purposes of the Journal and of the Association generally. At present the Association has no home so to speak; a room is hired for the Council to hold their meetings in as occasion requires; the new scheme would probably be made to include committee rooms in addition to the offices for the Journal, but possibly a sort of club house would be made for the convenience of the county members. The scheme of course met with opposition, but on the whole it was favorably received, and it appears to afford as profitable a method of spending the money as any that could be devised.

Dr. William Roberts, of Manchester, the author of a most excellent text-book on diseases of the kidneys and also well known as a dietetician (he was one of the first to recognize the value of peptonizing the various articles of food in some diseases) delivered an address on the second day on "Feeding the Sick." After pointing out how much this important branch of professional art had been neglected at the schools he spoke of the use of alcohol, tea, etc., when he enunciated the proposition that any food or food accessory, the use of which was not followed by a sense of discomfort, was beneficial to the individual. There is no doubt that this is sound common sense, but I am not sure whether it would be prudent to scatter the doctrine broadcast; people do not always listen to warning sensations, and the discomfort stage would often I fear be willingly ignored. Dr. Roberts pointed out that the practice of diluting wines with aerated waters was highly beneficial in the case of persons with weak digestions, for whom tea, coffee and cocoa were all harmful, owing to the property possessed by them of retarding peptic digestion.

Dr. Wilks delivered a short address in the Section of Medicine on taking the presidential chair; it was, as is usual with all his addresses, admirable; but it is not suitable for abstracting, as may be inferred from its title, "On Some Causes of Disease, and On Reparative and Destructive Processes."

Dr. E. H. Bennett, of Dublin, who presided in the Surgical Section, took the subject of Injuries of the Skeleton for his address and briefly indicated some of the more interesting facts that he had gleaned from the examination of a large number of specimens.

Dr. Gervis, the present head of the Obstetrical Society, presided in the Section of Obstetric Medicine, and made the Value of Antiseptics in Midwifery the chief text of his discourse.

Mr. Reginald Harrison, of Liverpool, opened a discussion on the diagnosis and treatment of tumors of the bladder, in which he strongly recsmmended perineal incision into the bladder and digital exploration, the tumors when reached being removed with forceps, whilst Dr. Stein, of New York, advocated the supra-pubic operation, as also did Mr. A. W. Bennett.

Since my last letter to you the joint committee appointed by the Royal Colleges of Physicians and Surgeons have made their report to those two bodies, but the exact contents of that report have not as yet been made public; I believe, however, that they recommend that the two colleges should jointly take steps to obtain power to confer a degree upon those who pass their conjoint examinations.

The agitation for some reform of the London University is still going on, but not much progress has been made with it of late; the agitation will, however, be renewed in November.

Considerable regret is expressed over here at the way in which the preliminaries of the Washington Congress are being managed. All those whose names are best known on this side of the water have withdrawn from it, and under these circumstances it is not likely that many will care to go over from here. Yours, etc.,

R. M.

—WE regret to learn that Dr. L. A. Sayre is again the victim of severe disease of the knee-joint, to such an extent that he is unable to aid those desiring his professional service.

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BACTERIO-THERAPY.

Cantani, of Naples, whom our readers remember as the originator of the treatment of cholera by irrigation of the lower bowel with tannin-solution (Review Vol. x, p. 471) has sent a preliminary announcement to the Central-blatt fuer die medicinischen Wissenschaften, July 18, 1885, of a therapeutic measure directed to the destruction of the specific microbe of tuberculosis. In our last number we gave a list of chemicals having a destructive influence on the bacillus of tuberculosis, but the practical clinical application of the knowledge therein contained is up to the present not feasible. Cantani hit upon a brilliant idea, which, if a practical success in tuberculosis, will open a most profitable field of investigation that promises to yield results most beneficial to stricken humanity.

The knowledge of the circumstance that certain bacteria destroy the cultures of others, and of certain pathogenic schizomyceti, when added to such cultures, led Cantani to attempt a practical therapeutical application of this faculty in various infectious diseases. He took up tuberculosis first and chose the Bacterium termo as his knight-errant to wage war upon the bacillus of Koch.

As a preliminary he established that the Bacterium termo, the ordinary micro-organism of putrefaction, is innocuous to the animal economy. He made conjunctival inoculations, injections into the stomach, into the intestine, under the skin, and inhalations by spray upon various animals. After it was fully shown that no harm is done by the Bacterium, a first experiment upon a patient was made.

On April 23, 1885, there was admitted to the hospital a woman, forty-two years old, with a tuberculous history and a cavity in the left apex. She had fever, cough and a profuse purulent expectoration, 90 c. c. being the average amount of sputa in twenty-four hours. Emaciation marked. Her sputa swarmed with tubercle bacilli, and inoculations upon animals developed characteristic tuberculosis in them.

On May 4, an inhalation was made by means of a continuous spray-apparatus of a pure culture of Bacterium termo in gelatine diluted with broth. The inhalations were repeated each day with the happy result of greatly reducing the amount of the expectoration. The sputa soon showed fewer bacilli of tuberculosis, and with their gradual diminuation the inhaled micro-organism appeared in increasing numbers. On June 1, no bacilli could be discovered and inoculations were of a negative result. The patient had ceased to cough, had lost her fever and had improved in her general nutrition.

This is the only trial Cantani has made up to date, and he states that while he is not so sanguine as to believe that such inhalations of this inimical microbe could reach and destroy the bacilli that are situated in the tissues proper, still a great good must result if the cleansing and purifying effect upon cavities and surfaces should become established. At any rate this experience must encourage to research and other than the tubercle bacilli may expect to be attacked in their strongholds by hostile invasions.

ODORLESS IODOFORM.

Oppler, of Strassburg, has lately found that roasted coffee has decided antiseptic virtues,

and has employed the finely triturated powder in the dressing of surface wounds. A further property that he became acquainted with in his trials of this powder is that of thoroughly and completely deodorizing iodoform. This is indeed a welcome announcement. The great objection to the use of iodoform has always been its odor, and the physician who employs it meets with many sensitive people in his rounds that, though of the best of breeding, openly and vigorously express their annoyance. Tannin, oil of bitter almonds, Peruvian balsam, Tonka bean and its active principle, Cumarin, have all been employed to disguise the offensive odor, with more or less, generally less, success than was first claimed. Oppler says that one part of triturated roast coffee will completely deodorize two parts of iodoform. Thirty per cent. added to a given quantity of iodoform does so pretty effectually, and forty to fifty per cent does so absolutely.

He gives the following formula:

	Grm.
Iodoform - - - -	50.0
Coffeæ tostæ subtilissime pulverat -	25.0

M.—

His formula for a deodorized ointment is this:

	Grm.
Iodoform - - - - - -	1.0
Coffeæ tost subtil. pulv. - - -	0.3
Ung.—— - - - - - -	10.0

M. f. ung.

Prof. Luecke objects to the use of coffee in cavities and sinuses and closed wounds, believing that the coffee may act as a foreign body. Oppler claimed that the impalpable powder, as it should be used, is no irritant. Be that as it may, the chief point is the deodorization of the iodoform. It is largely employed in surface-dressings, and as such may be mixed with the coffee.

By the way Oppler claims the following as a formula that makes castor-oil tasteless:

	Grm.
Ol. Vicini - - - - -	20.0
Sacchar. albi.	
Coffeæ tost. subtil. pulv. aa. - -	10.0

M.—

That is to say, in household parlance, one part of sugar and one of coffee rubbed up with two parts of castor-oil make it palatable.

Pulmonary Transfusion.

On page 284, Vol. XI, Review, we referred to inhalation of defibrinated blood as a means of treatment in profound anemia. The procedure at that time was not supported by any definite and concise statements. Fubini of Palermo, who proposed the method, has recently made, together with L. Giuffrè, a series of experiments to demonstrate the rationale of the proceeding. It will be remembered that in this "pulmonary transfusion" Fubini employed a fluid, composed of twenty parts of bullock's blood and eighty parts of a three-fourths per cent watery solution of chloride of sodium. About three and one-half ounces of this mixture were inhaled through the medium of an ordinary spray apparatus.

To demonstrate the rapidity with which red corpuscles are absorbed by the lungs and taken up by the circulation, Fubini resorted to a novel and highly interesting measure. He took the blood of frogs (rana esculenta or bufo) by puncturing the apex of the heart, and diluted it in the above proportions. This fluid, containing the large elliptical and nucleated red corpuscles of the frog, was injected gently into the trachea of a guinea-pig or a mouse by means of a hypodermic syringe. After fifteen minutes, and in subsequent experiments after five minutes, the mammal was killed, the thorax opened, all vessels leading to and from the heart ligated and the whole exposed surfaces bathed in a three-fourth per cent chloride of sodium solution. Then the contents of the heart cavities were examined microscopically. The result was that after five minutes already characteristic frog-corpuscles were found intermingled with the elements of the mouse or guinea-pig.

The experiment was reversed by preparing mouse or guinea-pig blood as above shown, and injecting it through the glottis of a batrachian. Five to seven minutes after, cor-

puscles of the mammalian blood were found in the frog's heart.

These experiments are a striking demonstration of the utility of the method of employing the respiratory tract as an avenue for blood-transfusion.

Iodoform Poisoning.

In a foreign exchange we find a report of poisoning and death from iodoform. The circumstances are as follows: An inmate of an institution for the insane was operated on for prolapse of the uterus and vagina. A colporrhaphia duplex and perineorrhaphy was made, and the sutured wound dressed with iodoformgauze. After twenty hours the gauze was removed and 3–4 grm. of iodoform were dusted on the wound. Sixty hours after the operation the patient refused food, became maniacal, and developed trismus and contraction of the muscles of the neck. Her pulse was 56–60 per minute. She died in collapse on the sixth day. The autopsy showed a reddish-yellow discoloration of the cortical substance of the brain; one kidney was completely atrophied and the corresponding ureter obliterated. The other kidney was vicariously enlarged.

In addition to the precautions to be generally had, on account of a peculiar idiosyncrasy, it would seem from the foregoing that old age (the woman was sixty-one years of age) and brain and kidney lesions, are to be seriously regarded as contra-indications to the use of iodoform.

Mississippi Valley Medical Society.

This Society, formerly the Tri State Medical Society, will meet at Evansville, Ind., Tuesday, September 8th, at ten o'clock, A. M., and continue its sessions on September 9th and 10th. Our readers know of the valuable scientific work done by this body, and this year's programme without doubt will be one of greatest interest. The Review was made the official organ at the Springfield meeting last year. We shall present the proceedings, etc., in full.

A large attendance is promised. Railroads return members at one-third fare. Hotel accommodations are ample at $1.50 and $2.00 per day.

For further particulars address the Secretary, Dr. G. W. Burton, Mitchell, Ind., or the chairman of committee on programme, Dr. A. M. Owen, Evansville, Ind.

We shall publish the programme as soon as it comes to hand.

Diabetic Neuralgia.—Cornillon (Revue de Méd., Medical and Surgical Reporter) after passing in review the writings of Dreyfous, Worms, Drasche, and others on the subject, relates two new cases of his own, in which cervicobrachial neuralgia, first on the left and then on the right side, and symmetrical sciatica, were evidently owing to the saccharine condition of the blood. Such cases are, on the whole, rare, as until now only twenty-two are on record. On analyzing these, it is found that glycemic neuralgia is not generally an initial sympton of diabetes, but occurs rather when this condition is confirmed, and when there is much loss of power, emaciation, and polydipsia. It comes on quite suddenly; the patient goes to bed apparently as well as usual, and is suddenly wakened up by a fearful attack of pain which drives him out of bed; or the pain comes on on waking in the morning, after a somewhat restless night. It is continuous, terebrating, or lancinating, or lightning-like, and there are occasional paroxysms which exceed in keenness and duration the most violent exacerbations of other forms of neuralgia. These attacks occur three or four times a day, after meals, and again on going to bed. The pain is so violent that one of Worms's patients threatened to commit suicide; one of Drasche's ran about in his room yelling and screaming. The nocturnal attacks appear to be worse than those which occur in the daytime. One of Cornillon's patients did not go to bed for several months, from fear of the heat of the bed bringing on a bad attack. The pain

is sometimes localized in the course of certain nerves; at other times it will also affect the muscles and bones. Digital pressure on the course of the nerve increases it, while compression all the way round rather relieves it. There is generally no fever, the skin is cool, the pulse normal. Buzzard, however, has seen a slight elevation of temperature, which is quite exceptional. If the pain continue for any length of time, there are loss of sleep and appetite, and great depression of spirits; but on the disappearance of the pain the patients recover themselves rapidly.

One of the most striking features of diabetic neuralgia is in its symmetry. This was seen in eighteen cases out of twenty-two. It is, however, rarely at once symmetrical; more frequently one limb is first affected, and its fellow only follows suit a few days afterwards. The same nerve-fibres are then affected, the distribution being quite regular. The pain, however, is generally worse in one limb than in the other; and mostly so in the one that was first affected. In Drasche's case it was bi-hemiplegic, in this way, that it was first perceived in the right leg, then proceeded to the arm, fore-arm, and fingers of the same side; after a time the lower and then the upper limb of the opposite side was affected; and in one of Cornillon's cases it alternated so that at first the left cervico-brachial plexus suffered, and some months afterwards the same plexus on the other side. The quantity of sugar in the urine was in most cases large when the neuralgia appeared; in a few, however, only minimal. In general an anti-diabetic treatment, by alkalies and diet, rapidly relieved the suffering, and the improvement went pari passu with the diminution of sugar. The attacks occurred then more rarely, and were less severe; but if the patient broke the regimen, the pain would return in its old intensity.

The prognosis is, therefore, rather favorable, if the true nature of the disease be recognized; but if it be not properly understood, the muscles will gradually waste away, and anesthesia of the skin sets in, which proves intractable.

The diagnosis does not present any great difficulties. It should, however, be recollected that not every neuralgia which occurs in the course of diabetes is of glycemic origin. Where it is independent of the glycosuria, it may be owing to carious teeth, when it affects the dental nerves; or to cold, fatigue, etc., and then selects those parts which have been principally exposed. Such neuralgia is generally unilateral, the attacks being of medium or even slight intensity; and the pain generally yields in a few days to ordinary treatment. On the contrary, where glycosuria is the cause, the neuralgia appears suddenly and without any appreciable exciting cause; there are three or four long attacks during the day, and the pain is intolerable; it is mostly symmetrical, and invades more particularly the sciatic plexus. It resists the ordinary treatment by morphia and salicylate of soda, and yields to anti-diabetic treatment only. Saturnine neuralgia is also symmetrical; but it has a different history, and the urine does not contain any sugar.

Rosenstein considers the diabetic neuralgia, as well as the glycosuria, to be owing to venous congestion in the abdominal organs; but this theory is unacceptable, as then sciatica would be much more common than it really is, and it would also habitually occur in persons suffering from piles, chronic nephritis, tumor of the spleen, congestion of the liver, etc.; such, however, is not by any means the case. Moreover, diabetic neuralgia occasionally affects the brachial plexus, the intercostal nerves, and the fifth pair. Worms, on the other hand, considers the excessively saccharine state of the blood to be the cause, whereby he thinks that the anatomical or dynamic modification of the nerves is produced, just as in gout and lead poisoning. This explanation is accepted by Drasche and Peter; but it is refuted by the circumstance that in some cases there is only a minimal amount of sugar in the urine, and the preceding symptoms of diabetes, such as polydipsia, emaciation, loss of power, etc., have only been slight. Cornillon is of opinion that diabetic neuralgia is owing rather to the presence of uric

acid in the blood, since most patients have had gouty or rheumatic antecedents, and sciatica is a somewhat common symptom of gout. As for any pathological lesion in the nervous system, it is evident that we have not to do with neuritis; for there is no pyrexia, no vesicular or pemphigoid eruption; no paralysis; on the other hand, the fact that this form of neuralgia is very obstinate, and affects homologous nerves, tends to show that there must be a temporary, although not extensive, lesion of the spinal cord. In what part of the spinal centre it may be situated, whether in the membranes near the posterior columns, or in the white or gray matter of the cord itself, it would be premature to say, as no necropsy has as yet been made.

Novel Removal of Calculi.—James Murphy, M. D., Surgeon to the Sunderland Infirmary, recently exhibited, at a meeting of the Northumberland and Durham Medical Society, 43 vesical calculi, and the instrument by which a gentleman extracted them from himself; and a short account of the case will doubtless prove interesting.

"About five years, ago the patient, whose age was about 50, and who had always enjoyed good health, was very much surprised to find one day, as he was passing his urine, that it suddenly stopped before the bladder was relieved,and on consulting his medical attendant, the latter passed a silver catheter, and immediately struck a stone. The patient was apprised of this, and lithotrity was suggested; but, being of a mechanical turn of mind—he was by profession an architect—he declined to submit to any operation, preferring first to see what he could do in that way himself. While thinking the matter over, and maturing his plans, he spent several days in trying to get the stone back into the urethra, with a view of ejecting it by a sudden flush of urine, and for this purpose he tried several positions on his face, knees, etc.; but though he could feel the stone fall on to the neck of the bladder, and, as he thought, touch the entrance to the urethra, he failed to make it enter the latter. After some deliberation, he constructed an instrument, consisting of a Florence flask, into which a cork was tightly fitted. This cork was perforated by a bone tube, into which a No. 10 black French catheter was made to fit with a screw; and, to make it perfectly air-tight, an India-rubber band could be rapidly passed over the joint. Owing to the extreme thinness of the glass in the Florence flask, boiling water could be poured into it, and he had some of the straw covering fitted on to the end of it, which, being a bad conductor of heat, enabled him to hold the flask after the boiling water had been poured out, while he screwed it on to the catheter previously introduced into his bladder, and produced a vacuum by the application of cold cloths to the flask. He then had an aspirator constructed, very similar to that used by Sir Philip Crampton many years ago, but of which it is needless to say he had never heard. He made several attempts with this instrument to get the stone into the urethra, for he never contemplated removing it directly by the aspirator, but never succeeded, as, not having a stopcock as in Crampton's aspirator, the formation of the vacuum was too gradual to form a sufficiently rapid current for this purpose. He therefore soon devised another form of aspirator, which was similar in construction, and more efficacious in use. He purchased a large ear-syringe, to which he fitted on a No. 10 catheter, from which he had removed the end as far as the eyelet; and while his bladder was full, he got onto his knees, rolled the stone about till he considered he had it at the entrance to the urethra, then gently passed his catheter with syringe attached till he struck the stone; then, without displacing the stone, he gently withdrew his catheter, about an inch, and rapidly pulled out the piston, and, after some failures, succeeded in getting the stone into the uretha, when, by means of straining at first, and afterwards, when it came within reach of his fingers, by external manipulation, he had the satisfaction of at last getting the stone into his hand; but he found his troubles were not then ended, for he found there were some others, which he removed in the course

of a few days. He then continued quite well for some time, these operations of what may well be called "litholapaxy" in no way inconveniencing him; but after the lapse of several weeks, he found that old pain in his right loin (indicating the passage of a calculus through the ureter) returning; and, after it had ceased, he again removed a couple of stones, in the same manner as previously; and so matters continued for a space of two years, calculi forming now and then, generally two or three being passed by the right kidney (never from the left), in rapid succession, and then being removed from his bladder; he continued well for several weeks, when the same process was gone through again. At last, getting tired of this breeding of stones, as he termed it, he was induced to go on a diet in which alcohol and saccharine fatty matters were avoided; and, in a little time, no more stones were found, and it is now nearly two years since he has been troubled with one. In all, he removed forty-three uric acid calculi, varying in size from a No. 6 shot grain to a large pea. He generally removed them as soon as they entered the bladder, and became so expert latterly that he could generally bring the stone into the urethra in two or three attempts; but, if he were otherwise engaged, he did not trouble much about the calculi, and sometimes kept them in his bladder for a couple of weeks without removing them. But this is a practice which he cannot recommend; for he assured me that, as soon as a calculus entered the bladder, the sooner it was removed the better. He knows each of the calculi by distinctive marks, and has an anecdote about most of them. One bears the mark where it was struck by the silver catheter; another was stopped in the urethra coming sideways, and had with much difficulty to be flushed straight; another he calls "the porcupine," as he drank some medicine to try to dissolve it, with, he alleges, the unpleasant result that the soft parts disappeared, and left several rough edges, which made him feel as if he had the fretful animal in his bladder. As is usual, a distinct history of gout was obtained."

Strophanthin, the New Diuretic.—The British Medical Journal refers to Prof. Fraser's paper on Strophanthus hispidus, read in the section of Pharmacology and Therapeutics, at the meeting of the Association at Cardiff, which places us in the possession of a new and valuable heart-remedy and diuretic. It appears that the drug is extensively used in many parts of Africa as an arrow-poison. In the Mangauga district, near the Zambesi, it is called "kombé," whilst in Senegambia and Guinea, the name "Inée" is more commonly employed. Dr. Livingston, in his narrative of an expedition to the Zambesi, refers to this poison, and says the arrows are usually made in two parts. "An iron barb is firmly fastened to one end of a small wand of wood, ten inches or a foot long, the other end of which, fined down to a long point, is nicely fitted, though not otherwise secured, in the hollow of the reed which forms the arrow-shaft. The wood immediately below the iron head is smeared with the poison. When the arrow is shot into an animal, the reed either falls to the ground at once, or is very soon brushed off by the bushes, but the iron barb and poisoned upper part of the wood remain in the wound. If made in one piece, the arrow would often be torn out, head and all, by the long shaft catching in the underwood and striking against trees." The plant which yields the poison belongs to the Apocynaceæ, and has been described and figured by Professor Oliver, of Kew, under the name of Strophanthus Kombé. It is a woody climber, and flowers in October and November. The follicles vary in length from 10 to 12 inches, and contain from 150 to 200 seeds, each weighing about half a grain, and bearing a beautiful plumose tuft, placed at the extremity of a delicate stalk. They contain no alkaloid, but are rich in an active principle, which Dr. Fraser calls "strophanthin." This is a crystalline substance of intense activity, which seems destined to play an active part in our list of heart-remedies. In physiological action it is allied to digitalin and other members of the digitalis group. It has been used, both experimentally on animals and

clinically in the wards, at the Infirmary at Edinburgh. The dose for hypodermic use is from one hundred and twentieth to one sixtieth of a grain. In the discussion which followed the reading of Dr. Fraser's paper, Dr. Murrell pointed out that the introduction of strophanthin would serve to commemorate, in a way which would otherwise be impossible, the centenary of the publication of Withering's classical work on "The Foxglove and some of its Medical Uses."

Alleged Malpractice.—We learn from the Philadelphia Medical Times that one of the most recent cases of malpractice has just been decided in a New York City court, and presents some curious features. The action was brought for damages caused by a physician treating a child for three weeks for tubercular meningitis, when the real disease was chorea, or St. Vitus' dance, and by this mistake suffering was caused and the original disease aggravated.

The testimony was very conflicting, but a verdict against the attending physician was rendered, and the appellate court, in affirming the judgment, said, in part:

"It was in evidence, moreover (though that is one of the questions in conflict), that Dr. O'Rourke, when called in, declared that the child should have out-door exercise and nourishing food, aud that in six months she would be able to go back to school, which, if true, was to be taken in connection with the fact that what he prescribed was bromide, to allay the twitching and spasms. It may, therefore, have been the only disease that she had from the beginning was St. Vitus' dance, and not meningitis in any form, and that the three weeks' daily attendance of the defendant and the thirty to forty dollars expended by the father for medicine during that time was thrown away; and, if this was the case, that it was an inexcusable want of ordinary medicall knowledge in the defendant to continue for three weeks treating the child for a disease that was such a serious one, in respect to which—though the defendant, Dr. O'Rourke declared it curable—Dr. Allen said that he had never known an instance in which a cure had been effected."

The appellate court, although regarding the case as not entirely clear, on the testimony decided not to interfere with the original verdict against the prisoner.

The Surgery of Scrofulous Glands.—Mr Pridgin Teale gives in the Lancet (Columbus Medical Journal) the history of nineteen cases in which he operated with complete success. The lecturer points out how cases of scrofulous glands can be cured by making an incision over the diseased gland, and then scraping away the entire caseous mass by means of Lister's scraper. The wound is then thoroughly cleansed by carbolic acid solution 1 in 40, or by carbolized glycerine 1 to 10, and afterwards it is charged with iodoform. An India-rubber drainage-tube, reaching to the farthest recess of the wound, is inserted, and the edges of the wound are carefully brought together by fine catgut sutures; a pad of salicylic acid is placed over the wound; and, if the glands have been completely enucleated, the drainage-tube may be removed at the end of a week; but, if not, the rubber tube must be replaced by gilt wire, which should remain until there is reason to suppose that all is healed except the track of the tube. This period will vary from three to eight or ten weeks. The author illustrates by cases a most important point, which must always be very carefully looked to—viz., a case may present itself as a soft suppurating swelling behind the ear. This, however, does not heal if an incision be made into it, the reason being that the caseating gland, causing the abscess, is seated under the deep cervical facia, and perhaps even under the edge of the sterno mastoid. The opening must be carried right to the situation of the diseased gland, which must then be well scraped, and drained from the very bottom of the wound. The scar from this mode of operating is linear, and not unsightly, quite different from the puckered scar one sees in cases that have been left to get well by themselves.

Should Keloid Tumors be Operated On? —The Philadelphia Medical Times reports that the Paris surgeons recently have had a very interesting discussion on this subject. At the present moment there are quite a number of these cases to be seen in the Paris hospitals. Prof. Richet operates, but, as a rule, they return. At the Hotel Dieu there is a young man in the service of Dr. Tillaux who has quite a large one of this sort of cutaneous growths, which are called keloid, cancroid, etc. The one in question certainly bears out the name keloid best, as it presents a perfect resemblance to a tortoise-shell in color, size and shape.

M. Monod said he had presented at the last meeting a child having a large keloid of the neck that came after a burn. Some of his brother surgeons said operate, others said do anything but operate. He requested the opinion of the gentlemen present. For his own part, as there was a pedicle in his case, he should like to operate.

M. Le Dentu preferred not to operate in these cases. He had just seen a case that had been excised by Prof. Richet, and it returned larger than ever. A second operation was followed by the same result. He had begun to treat the case with scarifications. When the keloid is ulcerated it is well to operate, in order to rid the patient of the trouble. Then, if it returns, try scarifications.

M. Reclus mentioned a case at the Salpetriere of a young woman of 17, having a voluminous keloid of the chin and neck, which had developed itself after a burn. He made compression with emplastrum de Vigo and at the same time gave salt baths, with cod-liver oil. In a short time (less than two months) she left the hospital with the tumor on the level of the skin and almost cured. Hence, he did not always think it wise to operate.

M. Le Fort advised operation in the case of M. Monod's patient, owing to the fact that the tumor seemed movable.

M. Berger operated in 1880 on such a tumor, passing five or six millimetres beyond the trouble, but eight months afterwards it returned larger than it was at first. Recently, with M. Besnier, he had seen a case of one on the shoulder, but this time he tried scarification, with better results.

M. Verneuil said that it was he whe told M. Monod to do anything but operate, because in that case a return is certain. Some keloids are curable when they are in a state of the body that a general treatment will be sustained. There are also some syphilitic keloids that will give way to a specific treatment. He has also seen some on the face cured after a course of saline water and iodine and cod-liver oil. Keloids that are found in arthritics will resist all treatment, and surely return after any operation. He has operated on a number of them without any success. The only thing that presents a chance of success is elastic compression. He had treated a case in this way and the tumor had gone, and he feels confident that the cure will be maintained.

M. Tillaux said that he never operated upon keloids, as they always return.

Cocaine in the Treatment of Inflamed Nipples.—The Therapeutic Gazette writes:

"The limits of usefulness of cocaine do not seem to have been reached. The sphere of its therapeutic activity is, on the contrary, constantly increasing. One of the peculiar features of the remedy is the promptness and constancy of its action. Its latest employment is that advanced by Unna in the treatment of inflamed nipples, in which affection he holds it has no rival in marvellously removing both pain and soreness. Every physician knows how troublesome and difficult it is to cure a fissured nipple if a baby is nursing it. To afford prompt relief, even while the child nurses, has not hitherto been accomplished. Cocaine is said to have succeeded in all cases tried by Unna and others. The nipple is to be brushed every ten minutes, in the intervals of nursing, by a weak solution (one half to one per cent) of the hydrochlorate of cocaine. Within one or two days the fissure will have healed completely, and all pain consequently will have completely disappeared. The bitter taste of the drug does

not prevent the child from nursing, nor is there any danger of its absorption and consequent untoward effects on the child. It would even possibly benefit the child when irritable and restless.

Migraine and Its Relation to Uremia.—The Boston Medical and Surgical Journal refers to an article on this obscure disease by Mr. A. Drysdale, in the Practitioner for April, 1885. The cause of the disease is still left unexplained. Its hereditary nature is evident; it often affects several members and generations of the same family. It is sometimes related with phthisis, usually of the more chronic variety. Enforced chastity seems in some way to predispose to it, and it often disappears after marriage. Summer and hot weather certainly determine the periods of the attacks. Some suppose it to be due to want of sufficient sleep; others say that it is caused by excess of sleep, and especially by the habit of napping during the day. The author considers that the symptoms depend upon the accumulation in the blood of a peculiar poisonous substance, possibly allied to creatin and creatinin, and that this poison has a special affinity for the roots of the great nerves at the base of the brain, the optic, the ophthalmic, and the pneumogastric. The reason for supposing that this substance is allied to creatin and creatinin is the close resemblance of the symptoms to those of uremia. The blindness, headache, vomiting, and subsequent stupor, bordering upon coma, in migraine are undistinguishable,except in degree, from the same symptoms in uremia. The poison speedily produces its own elimination. The author then describes a severe attack, and states that, with regard to treatment, a drug must be administered which is known, from its physiological action, to be certain to reach the seat of the complaint. Caffeine, theine, and guarana fulfill these conditions to a certain extent, but the best results are obtained from the use of nitroglycerin and sepia. The latter is especially successful in mitigating an attack, though it is not able to completely arrest one. Exercise, regularly pushed to the point of fatigue, is the only means of prevention. With reference to prognosis, the author states that, even when it is most intense, patients are not permanently injured by this malady; and that, when it occurs in conjunction with phthisis, the latter generally has a favorable issue.

Corrosive Sublimate in Venereal Warts.—A correspondent writes to the Medical Age that, having been advised to apply a solution of one grain to the ounce of corrosive sublimate to a case of venereal warts which came under his care, he found after the application through a mistake a solution of 10 grs. to the ounce was applied. The result was so satisfactory that he determined to still further increase the strength, and on his next case he made the solution of 20 grains to the ounce with excellent results. He now also applies this solution to chancres and chancroids, and also to indolent ulcers of the uterus, and is highly satisfied with the results. He has never witnessed the slightest symptoms of mercurial poisoning from this treatment, and does not believe that the application of corrosive sublimate in this strength is liable to be followed by absorption.

CONTRIBUTION.

TOXIC BACTERIA CULTURE.

BY FRANK W. VANCE, M. D., MEMPHIS, TENN.

Increase in the powers of vegetation and animal life is in ratio to increase in nutrient environment. Life in gigantic proportions flourishes 'mid the tropics. Here nutrient environment is at its highest in the form of heat, light and soil, watery and earthy. Not only life in gigantic physical proportions represents increment of excesses of force, but life in toxic powers. Poisonous reptiles, plants and bacteria attain their power of working evil through enormous increment of surrounding energies. Almost every disease of bacteric origin can be traced to the tropics as its genealogical starting point.

Impotent to stamp out the generations of toxic bacteria, we are yet on the verge of discovery of means by which their attacks on

higher animal life are shorn of their fatality, viz: inoculation with attenuated bacteria, that is, toxic bacteria, which by a process of artificial cultivation have been modified in their poisonous powers. By attacking the organism with this modified toxic bacteria it is rendered invulnerable to the attacks of the virulent species. The process of toxic attenuation of bacteria is to be accomplished thus: diminish the nutrient environment or nidus of multiplication of the specific typical microbe. The effect wrought on the generations of the microbe will be two-fold; firstly, its individual toxic power will be weakened; secondly, its reproductive power will be diminished. Deprivation of nutrient environment starves the microbe, and from the generation of starved microbes is attained the attenuated disease bacteria for inoculative purposes. Heat and light are the essentials of bacterial development, besides putrescent matter, i. e., organic matter capable of undergoing putrefaction or fermentation. Alkaline salts play an important part in developing bacteria. Of course, in some types of bacteria, certain organic principles may be necessary for their development, and experimental investigation furnishes the only means by which these principles are to be known. The choleric bacteria find their soil of multiplication in organic constituents or secretory or excretory principles of the intestinal tract, but culture of the cholera microbe has been accomplished in an artificial soil, foreign to the bowels, and a pure cultivation shows that the choleric microbe is developed entirely freed from any principle furnished in the intestinal tract. This has not been accomplished with the small-pox and syphilitic bacteria. They refuse to develop in any soil except the animal organism; an artificial cultivation has not as yet been obtained. If their artificial cultivation is to be accomplished it will be through a knowledge of the organic principle necessary for their nidus of multiplication.

A minimum of nutrient environment is of course necessary to attenuation of toxic bacteria. Experiment demonstrates the amount of nutrient environment which may be proportioned to the degree of toxic power manifested by the microbe aimed at. Experiment will yet discover the organic principles by which toxic bacteria that defy artificial cultivation and attenuation become multiplied, such as the microbe of syphilis, small-pox, etc.

In disease-bacteria cultivation and attenuation for inoculative purposes we witness the remarkable results of the working out of the law of evolution at the hands of man, powerful to shape the virulent microbe of disease into the attenuated microbe for prevention of disease by inoculation, and thereby render himself invulnerable to what he can set aside but not destroy.

SOCIETY PROCEEDINGS.

CHICAGO MEDICAL SOCIETY.

REPORTED OFFICIALLY FOR THE REVIEW.

Stated meeting, August 17, 1885, President, Charles T. Parkes, M. D., in the chair.

A CASE OVARIOTOMY

Was reported by Dr. C. T. Parkes as follows: In February, 1885, the patient, Mrs. R., aged 43, ten children, came under the care of Dr. O'Connell, of Ponca, Nebraska, who diagnosticated ovarian tumor. Dr. Parkes was requested to perform an ovariotomy. He found the patient in fair condition generally, hopeful and clear-minded. The abdomen was glistening with distension. Fluctuation was extremely well marked in all directions and in all positions of the patient. No resonance anywhere. No umbilical hernia. Her trouble dated from August, 1884, when a small tumor was perceptible in the right side. It gradually increased in size until January 17, 1885, when local peritonitis set in and was followed by rapid distension. Ovariotomy was done March 24, 1885. The patient had been placed in a bright light and an incision four inches in length made in the abdominal walls, midway between the umbilicus and pubes, to the peritoneum. There was no peritoneal fluid, but fortunately the bright light enabled me to distinguish between the peritoneum and the sac of the tumor, so closely were they applied to each other by adhesions. The adhesions were broken down so far as the hand could reach. A trocar was next plunged into the tumor and about eighteen quarts, or about thirty-six pounds, of a dark, sanguineous fluid evacuated. The sac was enormously distended and very thin. After the most of the contents were drawn off, the opening made by the trocar was closed by Nelaton's forceps. The sac was still adherent extensively laterally and posteriorly. These were destroyed as completely as possible, and yet it was impossible to draw the sac through the opening or to reach the deeper adhesions to the pelvis and flanks. Finally a free space

was found in the right iliac fossa, the sac turned up and the pedicle found and secured. The greatest difficulty was found in separating the sac from the intestines, which were universally adherent to the posterior surface of the sac, and could only be reached by turning the tumor upwards after division of the pedicle. A firm, broad adhesion to the stomach at the top of the cyst could not be separated, so a portion of the outer wall of the cyst, corresponding in size to the adhesion, was dissected from the tumor, and in that manner the entire tumor was finally removed. The pedicle was about two inches long and very slender, and came from the right side of the uterus. It was noticed in the specimen exhibited that the sac was almost entire, and that it was not smooth and glistening, but rough from the adhesions, and at a lower part there was an indurated mass about the size of a large orange. The sac and mass together weighed but three pounds. There was a vast area of oozing surface from which the adhesions had been torn, yet very little blood was lost. The abdominal cavity was thoroughly sponged, a drainage tube introduced, and the wound closed by silk ligatures.

The length of the incision, after the removal of the tumor, was but two inches. The patient progressed favorably until the fourth day, when she was attacked with severe and persistent vomiting, rising temperature and pulse. Stercoraceous vomiting ensued and increasing exhaustion until her death, on the sixth day, pointed to bowel obstruction.

The points to be noticed in this case are the great extent of the adhesions, the only clear space being in the right iliac fossa, the only way to reach them being to ligate and separate the pedicle and then turn the sac upwards, the small size of the pedical to such a large tumor. It seemed to be approaching the conditions of a free ovarian tumor described by Mr. Doran, who explains their presence by atrophy and abruption of the pedicle taking place when there are very vascular adhesions of the tumor to other parts, through which nourishment is carried on. It was also noted that this patient went along all right for five days, then symptoms of intestinal obstruction set in. The question was raised, whether it is not the urgent duty of the surgeon in such a case to reopen the abdominal wound and search for the seat of the obstruction and remove it.

A CASE REQUIRING BATTEY'S OPERATION

Was next detailed by Dr. Parkes. Miss M., age 17, single, an American, had suffered greatly from pain referred to right iliac fossa, increased during menstrual periods, for one year previous to placing herself under his care, January, 1885. She was already an invalid. Examination per rectum et vaginam disclosed retroversion of the uterus, accompanied with a dislocation of the right ovary into the Douglass cul de sac. Medical treatment having failed, Battey's operation for the removal of the prolapsed ovary was done June 2, 1885. Nothing unusual occured during the operation, and the patient convalesced rapidly. The temperature never rose above 99°. The dressing placed upon the wound was the dry dressing, consisting of iodoform, antiseptic gauze and a layer of absorbent cotton. This dressing was not removed until the seventh day, when the stitches were removed. The line of cicatrix was perfect throughout. There was no formation of pus. The blood around the stitch-holes was dry and scaly. The case was remarkable, principally, from the absolute freedom from any discomfort during the recovery from the operation. It was the first example of dry wounds Dr. Parkes had ever seen. The patient was out in three weeks. The uterus was not fastened in its new position, and is slightly anteflexed, but not antiverted. The morbid specimen exhibited is the ovary much enlarged with two small parovarian cysts developed on it.

A CASE OF DOUBLE OVARIOTOMY

Closed the series of cases presented by Dr. Parkes. Mrs. P., æt. 44, and had borne five children. She complained of a tumor growing for the last two years over the situation of the gall bladder. February 15, 1885, Dr. Parkes made an exploratory operation, and after cutting into growth, out popped this biliary calculus, about one inch long and bean-shaped. Nothing further was done, and the tumor began to disappear. However, during the manipulation of the abdominal walls he discovered two small tumors in the pelvis, in the region of the ovaries, which were supposed to be ovarian growths, but were not disturbed. But they rapidly grew in size, and were removed by laparotomy on June 16, 1885. The bowels had been moved two days previously. The abdominal incision disclosed the larger of the two tumors now shown, the larger filling the anterior inlet of the pelvis and held down by slight adhesions. These were broken down and the mass removed. It was found to be the degenerated right ovary. The pedicle was extremely short and was with difficulty secured. It was tied, divided and the stump dropped. Likewise the left ovary was removed and found to be degenerated. The tumor being smaller and pedicle longer,

no difficulty arose. Finally, in sponging, quite free bleeding was noticed from the right pedicle. It was again transfixed close to uterus and all hemorrhage ceased.

It was noticed that the sigmoid flexure of the colon was distended with feces, and this condition was remarked as unaccountable, from the fact that free catharsis had been obtained only two days previously. The patient did nicely for ten days after the operation, with the exception that no action of the bowels could be secured by medicines or enemas. A careful digital examination revealed, high up in the rectum, a stricture which could not admit the end of my index finger. The slight opening was surrounded on all sides by a thick, dense deposit of abnormal growth. The question of relief seemed to stand between forcible dilatation of the stricture and the establishment of an artificial anus. July 30, he dilated the stricture so as to admit three fingers in a cone shape. The tissue was very dense. It broke down with difficulty, and the induration extended up the bowel quite two inches. After this was done the scybalous mass was easily removed. By the next day the bowels had moved several times, freely, and the tympany disappeared. As Dr. Parkes had to leave the city July 5th, the patient was left in the care of Dr. R. G. Bogue, who subsequently told him the patient had died suddenly on July 10th, with symptoms of perforation of the bowels. Two inquiries arise:

1st. Is it not well to examine the rectum thoroughly before operations, in all cases?

2nd. Would the establishment of an artificial opening, as soon as the nature of the obstruction was determined, have given a better result in the case reported?

Dr. Parkes also exhibited a specimen of epithelioma of vulva, which he had removed by Paquelin's cautery.

Dr. Etheridge opened the discussion by asking how far we could go in removing portions of the intestine in cases of obstruction. He said that he had recently had a trying experience in case of ovarian tumor, in which, after the operation, the patient reacted well, but in forty-eight hours vomiting came on, which soon became stercoraceous and the patient died. On post-mortem examination, the whole of the large and most of the small intestines were greatly distended with flatus. A short piece of the small intestine, just where it entered the large one, was collapsed, and with great difficulty could any of the flatus be forced through it. He asked the author of the paper if he would have had the courage to have removed this portion of the intestine.

Dr. Franklin H. Martin said he had been very much instructed and entertained by Dr. Parkes' well detailed report. It had impressed him with three points or lessons that were dwelt upon in a recent article by A. Vander Veer, M. D., of Albany, N. Y., in the July number of the American Journal of Obstetrics, citing "personal observations on the work of Lawson Tait," at his private hospital in Birmingham, England. These three points, which to his mind explain, to a great extent, the wonderful results of that great operator, are:

1st. Cleanliness, pure air and sunlight.

2nd. Efficient good-looking nurses.

3rd. Close personal supervision, and attention to after treatment.

In the first case Dr. Parkes reported tonight that good light had saved him from going directly into the sac of the cyst in attempting to enter the peritoneum. This case also, he suggested, might have fared better had he been present to have given personal attention to the movement of the bowels, thus, possibly, removing the obstruction which was apparently present. In the third case, if personal attention had been given to the bowels sooner, the obstructions due to the stricture might have been removed and the ultimate result been more favorable. Here the nurse was at fault. Again, in the third case, if personal attention had been posible, the early operation of artificial anus, as Dr. Parkes suggested, might have influenced favorably the ultimate result.

Dr. Weller thought that dilatation of the rectum was the only feasible method of relief in the case in which a malignant growth was formed in the lower bowel. An operation for an artificial anus would have been difficult under the circumstances.

Dr. Sarah H. Stevenson asked why not open the sigmoid flexure and remove the accumulation from it at the time of the operation?

Dr. Parkes closed the discussion by saying he would remove a portion of the intestine if it presented the only way of saving the patient's life. If in a few days after the operation symptoms of obstruction should come on, he would reopen the wound and seek for the seat of trouble. He said that his theory of the best mode of procedure in these cases was gaining ground in the profession every day. Dr. Hamilton, of New York, lately reported a case of a gun-shot wound of the abdomen, in which there were eleven perforations of the small and four of the large

intestine. These were sewed up and the patient recovered.

The cause of the constriction in the case reported by Dr. Etheridge was probably due to an obstruction of the arterial supply to this part of the intestine, causing it to contract. Little good would come from an operation in this case. He thought an artificial anus might have been made in the second case referred to in his paper, though the bowel was distended. In these cases only a small opening was necessary. The cause of death was perforation of the bowels resulting from an ulcer incident to the dilatation of the rectum. He generally used saline cathartics to open the bowels. He would not have been justified in removing the accumulation from the sigmoid flexure at the time of operating, on account of the additional shock to the system it would have caused.

Observations on the Cause and Treat- of Infantile Eczema and Allied Eruptions, was the subject of a suggestive paper read by Henry T. Byford, M. D. He said, in the winter of 1880 he had been called to attend Mrs. R. in her fifth confinement. Two of her other children were dead,and two more, apparently healthy at birth, had died in convulsions before they had completed one year of life. Both of the last two had suffered from scabby eruptions and had become somewhat emaciated, but had not been considered syphilitic. The child born at this time, seemingly healthy at first, soon broke out with what appeared to be an ordinary eczema pustulosum. This eruption occurred on the scalp and on different parts of the body. The child suffered from progressive emaciation, and at the age of three weeks it would easily have been mistaken for a case of struma, to be treated with cod-liver oil. The patient was quickly relieved by calomel in minute doses and mercurial inunctions.

The next case referred to was that of Augustus G., seen first in the summer of 1876. The child had pustular eczema of the scalp; great nocturnal restlessness and suffered from progressive emaciation. There was no cause to suspect syphilis from the appearance of the child, but the father acknowledged to what seemed to be a perfectly cured attack of syphilis. The eczema rapidly disappeared, and the infant gained in flesh upon calomel powders and mercurial inunctions.

In contrast with these syphilitic cases, he next mentioned the case of E. H., a child one year of age, fat and well nourished, with no possibility of a syphilitic taint, but suffering from an eczema of the head, which spread over the body in patches. Prolonged local treatment had not improved it. The disease soon disappeared under the use of one-fifth grain powders of calomel, given twice a day, and an ointment composed of a dram of carbolic acid in an ounce of oxide of zinc ointment. The child had been over-fed and was put upon a restricted diet. There was no return of the disease.

The next case was one in which the eruption invaded the eyelids and caused great conjunctival sensitiveness. By the use of quarter-grain doses of calomel, given twice a day until a laxative effect was produced, then once a day, combined with the external application of carbolized oxide of zinc ointment and a borax eye-water, the condition of the patient was soon greatly improved.

He had succeeded in relieving many other severe cases of eczema by the use of calomel, and it made no difference on what part of the body the eruption occurred or what the condition of the patient was otherwise.

That eczema so frequently occurs in infancy, the large size and great activity of the liver in early life and the striking action of calomel has led the author to associate indigestion with infantile eczema as cause and effect. In syphilitic cases the alterative powders often produced an amelioration in the skin trouble sooner than they could through their direct action upon the blood poison. In all cases it is important to regulate the diet.

He knew of no authority who had considered derangements of the liver, and its accompanying digestive disorders, as the chief cause of eruptions of the skin, or who had recommended calomel as the chief remedy for its cure.

As calomel produced such prompt relief, and as improvement of digestion usually followed rather than attended the action of the remedy, one is led to believe that the cure is brought about not merely by improving digestion but by a removal of waste-irritating matter from the system, and from the great efficiency of mercury over other laxatives. He believed that the irritating materials are not only in the retained fecal matter but also in the blood—the products of imperfect digestion, assimilation and excretion.

He was led to the use of calomel in eczema from noting its good effect in cases due to syphilis, and as these patients improved so well under its use, he next tried it in cases where syphilis was only suspected, and then in all cases.

The usual dose was from one-quarter to one-eighth of a grain powder, given twice a

day, the dose to be reduced if too great irritation of the bowels was produced. In cases of children over two and a half years of age, in order to avoid salivation, he usually gave purgative doses of calomel every six or eight days and trusted to diet and other remedies in the meantime.

In the discussion Dr. E. J. Doering said he had not used calomel in eczema, but had had good results from the use of corrosive sublimate. He intends to use calomel, after this, in such cases, and he thought nothing better could be found to use in chronic cases.

Dr. J. Zeisler remarked that he was very much interested in this paper and, especially, to hear that calomel was useful in eczematous skin diseases. He always held the view advocated by Hebra, that eczema was caused by external causes and required external applications for its cure. Calomel might be of use in cases due to syphilis. He would not use blue ointment on young children. He asked whether it would not be best to use some external application in cases where there were thick masses of crusts covering the diseased part, and also whether the author of the paper had found salicylic acid useful in this disease.

Dr. C. W. Purdy thought retained excreta a cause of eczema, and called attention to the close relation existing between the intestinal tract and the skin, the condition of the one affecting the other. He had seen cases cured by the use of calomel and would favor this treatment.

Dr. J. A. Robison said that Dr. Byford had found mercury beneficial in syphilitic and non-syphilitic cases, probably because given in small doses it was a general tonic, as iron or cod-liver oil, increasing the number of red blood corpuscles and enriching the blood. Thus it counteracted any dyscrasia present.

Dr. Byford concluded by saying that Hebra was doubtless right in saying that eczema is caused often by external causes, but in some cases it was clear to him that the disease is due to causes arising within the system itself. In later years Hebra has modified his ideas of this disease somewhat. Although eczema could be cured by external applications, when so treated it is very apt to return. It is not so when removed by the use of calomel. External medication would often hasten the cure. He did not use salicylic acid. He believed that calomel in these cases acted as an agent causing eliminations as well as being a tonic.

The Society then adjourned.

GOOD HEALTH RESULTS FROM SANITARY WORK.

BY HENRY B. BAKER, M. D., LANSING, MICH.

Secretary State Board of Health of Michigan.

Sanitary authorities have claimed that the sanitary work which they have recommended to be done as a preparation for cholera—such as preventing and abating nuisances, attending to drains, sewers, privies and cesspools, cleaning up generally, and unusual carefulness in regard to food and drinks—would reduce the sickness and deaths from other diseases, even if cholera did not come. The weekly reports for July, 1885, to the Michigan State Board of Health, by physicians in different parts of the State, indicate that this claim is being realized in Michigan, so far as relates to the lessened sickness, it having been lessened from nearly every disease, and greatly lessened from fevers and from diarrheal and other diseases believed to be especially influenced by sanitary conditions; and this is true, notwithstanding the meteorological conditions in that month were rather more than usually unfavorable to health. It is proper to state, however, that the sickness in any month is influenced by the meteorological conditions in the preceding month, and that the meteorological conditions in June, 1885, were favorable to health.

Observations in Michigan for many years have shown that in July the meteorological conditions especially unfavorable to health are high temperature, excessive humidity of the atmosphere, and deficiency of ozone. The bulletin of "Health in Michigan, July, 1885," says: "For the month of July, 1885, compared with the average of corresponding months for the seven years, 1879-1885, the temperature was slightly higher, the absolute and the relative humidity were more, and the day and the night ozone were less."

Compared with the average for the months of July in the seven years, 1879-1885, remittent fever, intermittent fever, dysentery, consumption of lungs, cholera infantum, diarrhea, cholera morbus, measles, and whooping cough were less prevalent in July, 1885."

A large part of this decrease in sickness has undoubtedly been due to the medical and sanitary journals and the newspapers, which have constantly kept before the people the necessity for sanitary work, and the facts as to the spread of cholera in Europe.

It remains to be seen to what extent efforts for the exclusion of cholera from this country, and the general preparation for cholera

by boards of health and the people, shall prove effectual; but even if cholera shall not be entirely prevented, there will remain the belief that the measures which have so greatly decreased the sickness from other diseases cannot but have had their influence in decreasing it; and if cholera does not occur in this country, it seems quite probable that, by reason of the suffering elsewhere, there may be as many cases of serious sickness prevented in this country as there have been cases of cholera in Europe. But this may not continue without continued vigilance and effort.

Health in Michigan in July, 1885, compared with the average in July for the seven years, 1879–85.

Diseases arranged in order of greatest diminution of sickness in July, 1885.	Per cent of reports stating presence of disease.		Per cent of report more (+) or less (—) in July, '85, than the average for July, '79–85.
	In July, '85	Average in July, '79–85	
Remittent fever	30	51	—21
Dysentery	15	32	—17
Intermittent fever	65	82	—17
Consumption of lungs	48	63	—15
Cholera infantum	20	33	—13
Diarrhea	62	74	—12
Cholera morbus	39	49	—10
Measles	8	17	— 9
Whooping cough	14	22	— 8
Pneumonia	10	16	— 6
Typho-malarial fever	10	15	— 5
Diphtheria	11	16	— 5
Bronchitis	41	46	— 5
Rheumatism	59	64	— 5
Inflammation of kidney	17	21	— 4
Scarlet fever	11	14	— 3
Typhoid fever	6	8	— 2
Membranous croup	1	2	— 1
Small pox	0	1	— 1
Inflammation of bowels	16	17	— 1
Influenza	18	19	— 1
Erysipelas	21	22	— 1
Neuralgia	58	59	— 1
Puerperal fever	6	6	0
Inflammation of brain	6	6	0
Cerebro-spinal meningi's	8	5	+ 3
Tonsilitis	36	32	+ 4

It will be seen that there was less sickness than the average for July from nearly every disease reported. From only two—cerebro-spinal meningitis and tonsilitis, was there an increase.

BULLETIN OF THE NATIONAL BOARD OF HEALTH.

August 19, 18 .

I have to transmit for your information the following abstract from Consular Reports received at this office since the date of our last Bulletin:

Havana, July 30—28 cases yellow fever; 3 deaths.

Cardenas, August 1—Free from epidemics. No cases of cholera or yellow fever.

Matanzas, August 5—No cholera or yellow fever. Intermittent fever prevalent. City in bad sanitary condition.

Guaymas, Mex., Month of July—City and district in good sanitary condition.

Vera Cruz, Mex.—Consul reports by telegram August 3. Heat; yellow fever is increasing rapidy, from which there have been 46 deaths within two weeks.

Calla,Peruo, July 18—Yellow fever disappeared. Small-pox prevalent among lower classes.

London, Eng., July 25—small-pox declining. 648 cases in hospital against 775 the week previous. Admission, during the week 72, against 112 during the week ending July 18.

Paris, July 25—35 cases of small-pox treated in hospital. 1 death reported. Typhoid fever, 213 cases; 36 deaths.

Bordeaux, August 1—Free from epidemic diseases.

Marseilles—By telegram August 14. Cholera prevailing. Very fatal. 40 deaths daily. Spreading to the interior.

Antwerp, Belg., July 25—small-pox, 11 cases; 3 deaths.

Amsterdam, month of June—In good sanitary condition.

Barcelona, Spain, July 20—70 deaths from gastric and intestinal catarrh.

Cadiz, Spain, July 18—Cholera in Puerta Real, 11 cases, 9 deaths to July 22, date of mailing. Communication with infected districts has been cut off.

Valencia, Spain, July 18—Cholera dec nin the city.

Genoa, Italy, July 19—Free from epidemic diseases.

Venice, Italy, July 18—9 deaths from small-pox.

Trieste, Austria, July 25—Small-pox reported prevalent.

Warsaw, Russia, July 25—5 deaths from small-pox.

Bombay, India, June 30—6 deaths from cholera against 2 in previous week.

Progress of the cholera in Spain since our last

report, being for the period from July 4 to 17 inclusive.

Province.	Cases.	Deaths.	Per ct. Mortality
Albacete	35	13	37.1
Alicante	2083	856	41.1
Castellon	1367	639	46.7
Cuenca	467	205	43.9
Jaen	22	8	36.3
Madrid	1076	602	55.9
Murcia	2879	1128	39.2
Taragona	369	184	47.8
Teruel	81	33	40.7
Toledo	608	267	43.9
Valencia	10220	4979	48.7
Zaragoza	1690	585	34.6
Total	20897	9499	
Prev'ly Rept'd	28044	12347	
Total Rept'd	48941	21846	

It is probable the epidemic has prevailed much more extensively than is indicated by the above figures, as the Medical News published in Madrid states in its issue of July 30, that in one place more than one thousand certificates of deaths were found that had not been reported to the Registrar.

The same paper also states that in the vicinity of Valencia corpses are allowed to remain in some of the houses for more than forty hours, that the clothing and bedding of those who have died of cholera, which should be burned, are sometimes not taken from the houses for eight days and sometimes not at all, and that the public vehicles of Alfafar, etc., which have their stands in the Plaza of San Augustine, carry corpses to the cemetery at a charge of $46, and immediately upon removing the bodies load up with passengers for the return trip to the villages.

The editor very properly urges the people to unite for protection against the scourge by the observance of sanitary precautions.

W. P. Dunwoody,
Secretary.

—Dr. Warburg, the originator of the tincture known by this name, is said by the Medical Record to be a poverty-stricken old man. The Record says: "The medical profession demanded of Dr. Warburg his secret; he gave it, and now the druggists make the money and Dr. Warburg is left a poor man. It belongs to the medical profession to relieve the poverty which it has brought about."

SELECTION.

ADDRESS IN THERAPEUTICS.

Read at the Cardiff Meeting of the British Medical Association, and published in the Journal.

BY W. ROBERTS, M. D., F. R. C. P., F. R. S.,
Consulting Physician to the Manchester Royal Infirmary, Professor of Medicine in the Victoria University.

[CONCLUDED.]

Feeding the Sick with Liquid Food.

In a considerable number of conditions our patients are unable to take solid food, and are reduced to the necessity of using food which can be administered in the liquid form. This is usually the case in the febrile state and in serious organic disease, especially of the abdominal organs, and in the terminal stages of almost all diseases. There are other conditions in which, although the patient may have the ability to take solid food, it is not desirable that such food should be administered to him. In narrowing of the pylorus or other part of the digestive tract, in ulceration of the intestinal mucous membrane, it is obviously undesirable to administer articles of food which are capable of forming lumps or masses which may block up the narrowed parts of the intestinal tube, or irritate the ulcerated surfaces. There is thus a large field for the employment of liquid food; and one of the most embarrassing tasks in clinical dietetics is to devise food in this form in sufficient change and variety, and having at the same time an adequate nutritive value. Our resources in this state of things consist of milk, beef-tea and other meat-decoctions, cold-made meat-infusions, raw eggs, and the various gruels. I propose to make some remarks on each of these articles.

Milk.—By far the most serviceable liquid food we possess is milk. Milk contains, in almost equal proportions, proteid, saccharine, and fatty matter, and is capable alone, as we know, of sustaining life. All plans of feeding the sick on liquid food centre round milk. It can be given alone, or mixed with tea, coffee, or cocoa, or with lime-water, soda-water, ardent spirits, or with farinaceous gruels of various sorts, or as butter-milk, koumiss or whey. Were it not for the necessity of change and variety, we should, in a large number of cases, want nothing but milk. It should, therefore, be remembered that milk is

by no means a perfect kind of liquid food. In the course of its digestion, both in the stomach and in the intestine, milk, or rather the casein contained in it, is coagulated into solid masses, and these masses have to be redissolved before they can be absorbed. Not infrequently, if milk be given too freely, these curdy masses fail of being dissolved; and they pass down the intestine more or less unchanged, and are ultimately discharged with the stools. In this way milk may become an objectionable form of liquid food; these curds may block up a narrowed part of the intestine, or they may undergo putrefactive changes, and thereby irritate the tender or ulcerated mucous membrane. This drawback to the use of milk may be obviated by predigesting or peptonizing it, which is easily accomplished at a warm temperature by means of pancreatic extracts. The bitter flavor of peptonized milk is, however, nauseous to many invalids, and you cannot fully peptonize milk without developing this unpleasant flavor. One of the best means of covering the taste of peptonized milk is to add coffee to it. Another device which may sometimes be adopted with advantage, is to add the pancreatic extract to cold or iced milk. In the cold the action of the ferment is comparatively slow, and it takes some hours to produce an appreciable change of flavor. But as soon as milk, thus charged with the ferment, is swallowed and passes into the warm atmosphere of the stomach, it is rapidly digested. I have seen in cases of typhoid fever when undigested curds of milk were observed to be coming away with the stools, this plan followed by the immediate disappearance of these masses from the motions. But the palates of individuals are sometimes abnormally sensitive, and they detect, and resent, the mere presence of the ordinary pancreatine preparations in articles of food, quite apart from the digestive changes produced by them. I am inclined to think that they will prove a valuable addition to our resources when it is considerd desirable to subject food to a process of predigestion, and still more when it is desired to add the ferment to the food in the cold state, with a view to promoting its rapid digestion, after being swallowed.

Beef-tea and other Meat Decoctions.—Next to milk, in frequency of use and in high esteem, come beef tea and other meat decoctions. Long experience has satisfied us in this country of the usefulness of these preparations in feeding the sick. Beef tea and its congeners, however, take rank as restoratives and stimulants, rather than as nutrients. They contain no albuminous matter in solution, and the small quantity of gelatin contained in them cannot be of much account. There is a wide-spread misapprehension among the public in regard to the nutritive value of beef tea. The notion prevails that the nourishing qualities of the meat pass into the decoction, and that the dry hard remnant of meat fibre which remains undissolved is exhausted of its nutritive properties; and this latter is often given to the cat or dog, or even as I have known, thrown away as useless rubbish into the midden. A deplorable amount of waste arises from the prevalence of this erroneous notion in the households of many who can ill afford it. The proteid matter of meat is, as you know, quite insoluble in boiling water, or in water heated above 160° Fahr. The ingredients that pass into solution are the sapid extractives and salines of the meat, and nothing more, except some trifling amount of gelatin. The meat remnant, on the other hand, contains the real nutriment of the meat; and, if this be beaten to a paste with a spoon, or pounded in a mortar, and duly flavored with salt and other condiments, it constitutes not only a highly nourishing and agreeable, but also an exceedingly digestible, form of food.[1]

Cold-made Meat Infusions.—The defect in nutritious value of beef tea led Liebig to suggest the use of cold-made meat infusions. He recommended that minced beef should be infused in cold water, acidulated with a few drops of hydrochloric acid. An infusion so prepared differs essentially from beef tea in the fact that it contains, in solution, a large amount of albuminoid matter. The addition of the acid is, according to my observations, a needless complication of the process. Infusions quite as rich in albumen were obtained when simple water was used, as when the water was acidulated with hydrochloric acid. Infusions made from minced meat with half its weight of water, and allowed to stand for two hours, and then pressed through cloth, were found, on analysis, to contain over four per cent. of dry albumen. This amount of proteid is equivalent to that contai cow's milk. The nutritive value of such infusions is, therefore, very high. When heated to the boiling point, they coagulate into a solid jelly. Made from beef or mutton, the product has an unplesant bloody appearance, but, when made from veal, the coloration is

1. These remarks on beef-tea apply equally to Liebig's Extract of Meat, Brand's Essence of Beef, and Valentine's Meat-Juice, all of which are devoid of albuminous constituents.

much paler. The best preparation, however, is made from the meat off the breasts of a chicken. This meat is nearly white, and it yields an infusion which is almost colorless, and which sets, on heating, into a solid white jelly, of very agreeable appearance. Cold-made meat-infusions cannot be heated above 114° F. without becoming turbed from commencing coagulation of albumen. It is, therefore,impossible to cook them without destroyng their liquid character. The objection to these infusions is their raw flavor, which to many is highly disagreeable—though some invalids take them without the slightest obection. The best way of covering the raw taste is to add some ordinary beef-tea or a little of Liebig's extract of meat. Some prefer a flavor communicated by a slice of lemon, or by the addition of a little claret.[1]

Beaten-up-Eggs.—Another highly nutritive form of liquid food is supplied by raw eggs. The yolk, or white, or both together, are beaten up in various ways and combinations which are well known. Eggs are more easily digested by the stomach in the cooked than in the uncooked state; but, when the stomach is weak and unable to digest solid food, beaten-up eggs pass through it into the duodenum without being meddled with, and are slowly digested in their passage down the intestine. They are incapable of forming lumps or masses, and are, therefore, well adapted for cases of narrowing or ulceration of any part of the digestive tract.

Fortified Gruels.—A very important kind of liquid food is furnished by gruels made with the several kinds of cereal or leguminous seeds. Gruels are not by themselves an agreeable kind of food; they lack flavor, but mixed with milk or beef-tea, they constitute a valuable addition to our resources in feeding the seriously sick. When prepared from the cereal flours in the usual way, they can only be made of feeble nutritive power, if their liquid character is to be preserved. These flours are very rich in starch, and gruels made from them become thick and pasty if the proportion of flour used in their preparation rise to four or five per cent, and a gruel of this strength does not contain more than one-half per cent of proteid matter. But, if the meal be mixed beforehand with one-eighth of its weight of ground malt, you can prepare from these flours gruels of much higher nutritive value, and still preserve their liquid character. The diastase of the malt acts upon the thickening starch as the heat rises, and converts it into soluble starch and dextrine. These fortified gruels can be made with as much as 20 per cent of meal and still maintain the fluid state. Such gruels contain about two per cent of proteid matter, and about 14 per cent of carbo-hydrates, and are admirably adapted, combined with milk or beef-tea, to supply a varied kind of liquid food of highly nutritious character. Mixtures of this class seem especially suited for the nourishment of cases of typhoid fever.

A matter of interest, in designing food for the sick-room and nursery, is the consideration of the special properties of the several kinds of cereal and leguminous substances used as food. In point of chemical composition the several kinds of cereal grains are closely allied; still, there are differences between them, and these differences may be of importance. The proteid of wheat is not quite identical with that of oats or barley. On the other hand, leguminous seeds differ importantly in composition from the cereal grains. Taking the lentil as a type of the leguminous group, it is to be observed that lentil-flour contains twice as much proteid matter as wheat or oat flour, and almost twice as much lime. Moreover, the proteid of the leguminous seeds differs materially from that of wheat or oats. These differences are probably of not a little importance in feeding the sick and the young; and, if we had more knowledge and experience in their use, we could, perhaps, utilize with advantage these several cereal and leguminous products, and combine them in varied ways to meet the indications and necessities of different cases.

You must all have observed how there has grown up in these latter years an enormous trade in prepared "foods" for infants and invalids. The very success of this trade is some evidence of the usefulness of these articles. Their composition is generally made more or less of a secret, but whatever secret there be must be hidden within a very narrow compass. The several possible flours out of which these "foods" are mingled can be easily counted—wheat, barley, oat, maize, pea, lentil, and one or two others. These are the ingredients—with malt-flour in some cases—out of which they are all compounded. Now, I cannot help thinking that it would be an advantage both to ourselves and to our patients if we knew more precisely what we were about in this matter, and if we were in a position to prescribe for infants and invalids the several kinds of farinaceous aliments in proportions known to us, instead of blindly using some mixture of which we know not

1. Cold-made meat-infusions keep badly. They should be preserved in a cold cellar, or, still better, on ice.

the exact composition. It is impossible for us to make progress in dietetics on such a path. I can quite believe that these flours have their special excellencies, and that they are severally adapted for different cases and conditions. In the first place they have distinctive flavors, and thereby may be made to contribute to the important end of providing change and variety for the invalid. Moreover, the faculty of "agreeing" of the different flours, in reference to the individual idiosyncracy, is a point of not a little significance. Lastly, the difference of chemical composition between the cereal and leguminous flours must have an important bearing on the dietetic use of these two groups of aliments. It is, I repeat, a serious disadvantage that the control of the preparation of food for the sick-room and nursery should pass from the hands of the medical attendant to those of the purveyor. In the matter of drug-giving, all enlightened practitioners are chary of prescribing secret remedies. Such a practice, it is felt, must be fatal to the intelligent use of drugs. So it is with providing food for the sick. What we want is to have at our disposal a supply of the several articles of food in their simple state, and suitable appliances in connection with the sick-room or nursery for cooking and combining them in various ways according to the exigencies of our patients.

If I were asked to enumerate the ingredients and apparatus which are necessary for the cuisine of the sick-room and nursery, I think I could do so very briefly. In addition to the resources of the domestic kitchen and larder, the sick-room kitchen should contain a supply of the following flours: oat, maize, malt and lentil flours in a finely pulverized condition and freed from bran. It should be provided with a solution of soda-bicarbonate of known strength. This would be of use to add to milk when necessary, and to assist in the preparation of peptonized articles of food. Next to these would come a reliable pancreatic extract, and a preparation of pepsin or rennet for the production of whey. The associated apparatus should include a thermometer, wherewith the nurse could, when desirable, heat up cold-made meat infusions to a proper temperature, and regulate the warmth required in the predigestion of food. A double-cased sauce-pan would form an indispensable item; this makes an admirable hot water bath for the preparation of beef-tea and fortified gruels. A pair of scales, glass-measures, and a mincing-machine would complete the list. Finally, there should be, for the service of the nurse, a card or sheet containing plain directions for the preparation of the various kinds of liquid food.

Given these simple appliances, I see no difficulty, in these days of skilled nursing, in the medical attendant being able to prescribe almost any kind of liquid food for his patients in any combination, and having it served up for the invalid in the most suitable possible manner. I have ascertained that there is no difficulty on the part of the miller in producing meals from malt, oats, or lentils, freed from bran and coarser particles, and in nearly as fine a state of preparation as wheaten flour. In this state, these meals are susceptible of much more rapid and perfect cooking than when roughly ground. I have little sympathy with much that has been said of the advantages of whole meal and decorticated flour. It has been alleged that the too complete separation of the outer parts of the grain deprives the flour of its mineral matter. If we lived on bread alone, there would be some force in this objection; but as that is not so, and that we find in milk, meat, fish, eggs, soups, and fresh vegetables, a superabundant provision of mineral matter, and have, moreover, always at our elbows a supply of salt, there can never be any lack of saline materials in our food. The branny matter of the flour is both indigestible and irritating to the primæ viæ; and although it may not injure, or may even be usesul, to the strong and healthy,it is quite an unfit element in food designed for the weak and tender membranes of the invalid and infant.

Gentlemen, in bringing my remarks to a close, I should like again to press for a more systematic and a more comprehensive study of dietetics. The effects of diet are profound and far-reaching, and exceedingly subtle. Some inkling of this is got from the history of gout. You all know how slowly and how insidiously the gouty diathesis is developed under the influence of diet, and how it may affect the descendants unto the third and fourth generations. The immediate effects of diet are often not the most important. Behind these are remote sequences of vital concern to the family and the nation. And it is not solely in regard to feeding the sick that a scientific knowledge of dietetics is useful. There are public questions of great moment, affecting the food-habits of the people, the consideration of which ought not to be dominated exclusively by popular opinion. In legislating on such questions, it is of the last importance to proceed on correct lines; for it is certain that any policy which ignores the instincts of mankind and the laws of na-

ture is foredoomed to failure. I believe that a comprehensive study of these questions from the side of history, and of natural history, would throw unexpected light on the issues involved and furnish data of great value for the guidance of the legislator and of the social reformer.

CORRESPONDENCE.

NEW YORK LETTER.

NEW YORK, August 18, 1885.

Editor Review: The first annual report of the New York Cancer Hospital has just been issued and gives a full history of the movement which has led to the establishment of this most worthy charity. This institution, it must be remembered, is entirely distinct from that one known as the "New York Skin and Cancer Hospital," which now occupies a humble building on the eastern site of the city. In the report is a heliograph illustration of the new building of the institution now in process of erection at Eighth Avenue and One Hundred and Fifth Street, facing Central Park.

The chief donor has been Mr. John J. Astor, whose gift was two hundred thousand dollars. Donations of twenty-five thousand dollars have been made by Mrs. R. L. Stuart and Mrs. Mary Rogers, and one of twenty thousand dollars by Mrs. John J. Astor. The entire amount thus far contributed amounts to over three hundred and sixy thousand dollars.

It seems that originally Mr. Astor's proposal was to erect a pavilion for the treatment of cancer patients on the grounds of the Woman's Hospital. For various reasons it was deemed unwise to accept this offer. Meanwhile other charitable persons—notably Mrs. Gen. Calhoun—were moving in the direction of establishing an independent cancer hospital, unaware of Mr. Astor's move. By happy circumstance these philanthropic endeavors were finally brought into combination with the successful result already noted.

The corner-stone of the new edifice was laid on May 17, 1884, and the latter has since been steadily advancing toward completion. It is expected that the pavilion for women will be completed by the 1st of October next, and ready for occupancy. An appeal is made for funds wherewith to erect a pavilion for men and for an endowment to provide for the running expenses of the institution. As soon as the building may be open for inspection a description of it will be sent to the REVIEW.

Mention should be made of the publication in the report of a letter from the late J. Marion Sims. After advocating the scheme and a liberal policy in its pursual, he says: "I would take knowledge wherever it can be found. I would invite any man who claimed to have a specific to come and try his remedies under the supervision of a committee specially appointed for the purpose. I would offer a large premium for any improvement, whether in constitutional or in local treatment. I would do everything to obtain practical knowledge on this subject, regardless of the source from which it emanated." Such a liberal policy could not fail to be advantageous.

The Sanitary Division of the Health Board has done some very good service of late and serves as a model for certain other bureaus of that politico-sanitary organization. An epidemic of dysentery broke out in a crowded section of the city, inhabited chiefly by Polish Jews. An inspection revealed the fact that decayed fruit and putrefied fish were being sold in large quantities. A vigorous raid was instituted and repeated from time to time. Tons of the above material were confiscated and dumped at the offal dock. This quarter of the city it is almost impossible to keep clean, owing to the filthy habits of the people, who make pigs and geese literally their bosom friends. Should cholera visit New York this fall, it would most certainly find a breeding place in this quarter.

The latest medical gossip is to the effect that Dr. Henry B. Sands has resigned his chair of Practice of Surgery in the faculty of the College of Physicians and Surgeons. He will, however, continue his clinical work in the college. To fill the vacancy caused by Dr. Sands' resignation the following unique but eminently practical scheme has, it is said, been hit upon. A series of lectures on the practice of surgery is to be delivered by each of the three competitors for the vacancy. A delegation from the faculty is to attend, and that lecturer who shows the most ability as an instructor is to be the fortunate man. This seems rather an improbable scheme, but I hear it on good authority. The three names mentioned in connection with the place are those of Dr. W. T. Bull, Dr. W. S. Halstead and Dr. R. J. Hall. All three have been connected with the department of practical anatomy; in fact, the latter two now. The first named gentleman is connected with Chambers Steet and the New York Hospitals and has had the most experience of the three named. The vacant professorship is one of the most influential in New York City.

Another report has been issued by the United Charities organization. Its good work is going steadily on. It earnestly condemns giving alms to street-beggars, as it has found most of the applicants to be frauds. J. E. N.

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EARLY TAPPING OF ASCITES.

On the strength of a number of experiments Ewald argues in the Berliner Klinische Wochenschrift in favor of early tapping in abdominal dropsy. He claims that the disadvantages cited against early operation, such as rapid reaccumulation, and thereby increased loss of organic substances, collapse, peritonitis, etc., are more than counterbalanced by the absolute benefits. Collateral circulation is much improved, pressure upon the abdominal viscera and the heart and lungs is relieved and a degree of function more allied to the normal made possible. Assimilation of food is thus enhanced and the administration of violent drastics made unnecessary. The dangers of injuring the intestine are not great, if due care is taken. The result, of course, is only palliative in cases where organic lesion precludes the possibility of a complete cure. Life is certainly not shortened by the early interference; and a more frequent repetition of the measure is plainly made possible only by a prolonged lease of life.

THE ROLE OF THE OSTEOMYELITIS COCCUS.

In order to determine the bearing the micro-organism of osteomyelitis has to the localization of that disease, Ribbert conducted experiments with pure cultures and has reported his results in the Deutsche Medicinische Wochenschrift.

To the end in view pure cultures were introduced into the circulation and examination at various periods afterwards showed that the cocci rapidly disappear from the circulation, remaining last adherent to white corpuscles. After twenty-four hours the organisms were found in all the organs; gradually they disappeared and were found finally in the kidneys alone. This Ribbert believes to be due to the capillary arrangement in those organs in part, and then, too, because they are the ultimate channels of elimination.

Localization at any given point was found to be due, together with the circumstance of embolic occlusion, to traumatism in first order. This is a well established fact in our experiences with osteomyelitis and in fracture-experiments after inoculation.

Ribbert's examinations of the bones and articular apparatus revealed no especial tendency of these parts to the reception and multiplication of the microbe. His conclusions therefore are:

1. The localization of an infection with the organism of osteomyelitis is not primary, but subsequent to a general invasion of all organs.

2. The factors determining the seat of development of the disease are: a) embolic occlusion, b) excretion by the kidneys, c) influence of local, traumatic inflammation.

CALOMEL HYPODERMICALLY IN SYPHILIS.

In the Vierteljahrschrift f. Dermatologie und Syphilis a report is made by v. Watraszewski of seventy cases of recent syphilis treated by subcutaneous administration of calomel. The amount used in each injection was 0.1 grm. of calomel suspended in mucilage. Only in a few substances was double the above amount administered. The injections were made in the gluteal region, at intervals of seven, ten, to fifteen days. The interval is determined by the degree of stom-

atitis developed. As a rule, three injections sufficed to cause all manifestations to disappear. A fourth injection was, however, generally made. The seventy patients got, all in all, 257 injections. Only four abscesses developed. It is deemed advisable to direct complete rest for several days after the procedure.

NOVEL PROCEEDING IN TRAUMATIC TETANUS.

In the Muenchener Medicinische Wochenschrift, No. 5, 1885, Reichert reports a case of traumatic tetanus that recovered after bloody stretching of both sciatic nerves. The patient was a soldier 21 years of age, who had been bitten upon the shoulder by a horse. Tetanus developed and became most violent. On the 14th day both sciatic nerves were exposed just below the gluteal fold. The nerves were then stretched for ten minutes, both at the proximate and distal portions; the nerves became livid with venous congestion. After the patient awoke from the narcosis not a single attack returned. The patient was discharged cured, after he had passed through a severe attack of erysipelas.

THE RELATIONS OF SCROFULA AND TUBERCULOSIS.—Albrecht, in the Archiv for Kinderheilkunde (New York Medical Journal) insists anew upon the pathological identity of tuberculosis and scrofula, and, from recent literature, gives a host of instances where tubercle bacilli have been found in scrofulous formations. The practical bearing of the connection between these two morbid states is evident; and, if this connection were only a probable one, it would still claim our attention in view of the great prevalence of scrofula and the fatality of tuberculosis. If there is a chance that the former can develop into the latter, or even if we are limited to the certainty that the former leaves the system in a condition suitable for the develop ment of the latter, we must welcome any means by which scrofula itself can be prevented, or by which, when once initiated, its further development can be checked. According to Albrecht, we can effect the former by inoculation of scrofulous material, conducted in the same way as a vaccination for smallpox. A further means for accomplishing the same end is the refusal to permit a tuberculous mother to nurse her infant, and a limitation, as far as possible, of the marriages of patients affected with syphilis. For the suppression of scrofula when once inaugurated, Albrecht recommends most earnestly the replacement of starchy by nitrogenous diet, and more particularly the employment of peptones as an aliment. Another very useful agent is the inhalation of oxygen. This gas, given to children four or five years of age, in quantities of fifteen to thirty litres twice a day, notably stimulates tissue-metamorphosis, and often renders possible a degree of super-alimentation which could not otherwise be undertaken without endangering the integrity of the organs of digestion.

RESORCIN IN MALIGNANT NEW GROWTHS.—In the Russkaia Meditzina (London Medical Record) Dr. G. J. Gatchkovsky details four cases of cancer-like new growths, in which he, following the instance of Dr. Mannio, applied locally resorcin, either in substance or in the shape of a 50 per cent. vaseline ointment. In two cases of what seemed to be epithelioma of the lower lip, complete cicatrization followed after eight and five weeks' treatment; in one of them there was no return up to the date of the article (thirteen months have elapsed); but in the second case, by the end of two months the cicatricial tissue became exulcerated, and lancinating pain reappeared; the ulcer again healed under resorcin treatment of three weeks' duration. A third patient, a woman aged fifty-six, presented a malignant tumor of the anal margin, as large as a hazel-nut, and diffuse cartilaginous infiltration of the lower part of the rectum. The tumor entirely disappeared after fifteen days' powdering, twice a day, with resorcin; subsequently, daily rectal suppositories with twenty grains of resorcin were administered, but unfortunately the patient soon left the town, and thus was lost out of sight.

A fourth patient, a woman aged forty-five, was admitted to the hospital about one month before her death, with advanced cancerous destruction of the whole right half of the tongue, and with induration of the submaxillary lymphatic glands. Powdering (twice daily) with resorcin rapidly removed the offensive odor and hemorrhagic tendency, and also greatly improved the general state of the ulcer. Dr. Gatchkovsky found resorcin in powder of great use, also in cases of acuminated condylomata and fungus umbilici.

"What to do in Cases of Poisoning."—The New York Medical Record reviews a volume with this title, by William Murrell, M. D., F. R. C. P. Fourth Edition. Published by H. K. Lewis, London, 1884, as follows:

"Before us is a diminutive volume bearing this title. The knowledge of its contents might prove more valuable to its possessor than that of many a quarto.

What graduate is there who does not feel, after he leaves college, hanging over him like the sword of Damocles suspended by a hair, the dread possibility of a summons to a case of poisoning? His mind is full of scraps of information with which he has passed his examinations and obtained his degree. Made more prominent because of questions asked with reference to the subject, toxicology and antidotes have assumed an awe-inspiring importance. The dread of cases of poisoning ever remains with him; but some way the knowledge which carried him to the triumph of obtaining his degree oozes away with time, leaving only a vague notion of just when and why the plaster from walls and ceilings should be scraped to administer to the poisoned victim; when the gallons of coffee should be given; when the patient should be flagellated and walked about, and when on no account he should be raised from a recumbent position; when the whites of eggs should be called for; when the vinegar cruet should play an important part as furnisher of an antidote—all this exceedingly useful and necessary knowledge becomes, in many a medical mind, perfectly clear on every day topics, a hopeless jumble.

Says the writer of the little volume: "I can imagine nothing more painful than to be called to a case of poisoning, and not know what to do." Many a doctor has a sneaking notion of how painful this would be, and yet he remains unprepared for such an emergency putting off refreshing his rusty knowledge, allowing himself to go unsupplied with the most common antidotes; procrastinating like a man who knows he ought to make his will, but does not.

The doctor cannot, like a cook, have his recipe-book in his hand; he must carry it all in his head. His ideas must be ready, like fire-engines, for full service when called upon.

To avoid the complexity of the subject and the perplexity of diagnosis, a search has been made for that philosopher's stone, a "multiple antidote;" that is, a preparation which will neutralize the toxic action of all or most all the active poisons. Two such are given as very nearly answering the purpose.

One of these is the iodide of starch, which is efficacious in poisoning by sulphuretted hydrogen, the alkalies, the alkaline sulphides, and especially the alkaloids, with which iodine forms an insoluble compound. The other is given as follows: Saturated solution of sulphate of iron, 100 parts; water; 800 parts; calcined magnesia, 88 parts; purified animal charcoal, 40 parts.

The iron solution should be kept separately, and the magnesia and charcoal mixed in a bottle, and the whole well shaken together. It may be administered ad libitum, a wine-glass or more at a time. It is said to render preparations of zinc, arsenic and digitalis absolutely inert, and to partly neutralize the action of mercury, morphia, and strychnine. It has, however, no action on the alkaloids, and none on phosphorus, antimony, or hydrocyanic acid.

Better by far than "the multiple antidote" is "the antidote-bag." We commend it to our readers. If you would purchase immunity from the dread of encountering a case of

poisoning, possess "the antidote-bag;" then, if the summons comes at midnight, or any other hour, you will go forth without trepidation. You will have in hand everything you need—antidotes, emetics, stimulants, hypodermic syringe; not to mention the little book, your fountain of wisdom.

"Every doctor should have a stomach-pump," also says our mentor, or at least be sure he knows how to rig up an apparatus which will do the same work.

For a young physician there links an added terror to the summons to a case of poisoning, the dread of having to encounter the legal proceedings which will surely follow a fatal issue. Our little book gives sage advice in such an event, and adds this, which is sufficient to bolster up the courage of any faltering medical witness: "If you have read up on the subject, you should be more than a match for any barrister."

You have your book of reference at hand, your "antidote-bag" or "multiple-antidote," a stomach-pump; you have become primed to give legal evidence, as if accustomed to it all your life. One thing still remains. "Every medical man should get up the subject of ptomaines," remarks our author with emphasis. These closely resemble vegetable alkaloids; but they are cadaveric substances, generated during the decay of the dead body, and are supposed to be alkaloids. It must be known that they exist, and how they react.

It should ever be remembered that, as Dr. Murrell tersely and correctly puts it, "all rational treatment of cases of poisoning is founded on a correct appreciation of the physiological action of drugs." It is the same with reference to diagnosis. "There is no royal road," he says; "the only way to arrive at a correct conclusion is to utilize your knowledge of the physiological action of drugs." Then you will always know "what to do in cases of poisoning."

Peptonized Milk-Diet.—In a paper read before the Medical Society of the State of New York, and subsequently published in the Sanitarian, Aug., 1885, Dr. Walter B. Chase discussed this interesting subject as follows:

"The value of milk-diet in disease is becoming generally recognized. Being the only single article of food which combines in itself all the elements of nutrition, its use needs no argument, and its wide range of applicability renders it the more useful.

In some individuals, and in certain conditions of the alimentary canal, it is difficult of digestion. In infantile life, when artificial feeding may be required, its use is not always acceptable.

Its inapplicability in the conditions referred to is due largely to the frequent indigestibility of casein.

The acid of the stomach acts rapidly, and coagulates the milk into curds large or small, but sufficiently large as they pass from the stomach to resist the solvent action of the alkaline juices of intestinal digestion, and appear as such in the stools.

For this reason salts of soda and potassa, or lime water, are added to the milk to retard the rapid action of the gastric juice, and so diminish the primary size of the curds. So, too, farinaceous material is added to the milk for a similar purpose.

In fact, this curdling process of milk in the stomach is the principal obstacle to its universal use as a substitute for mother's milk, and as an article of diet in more advanced life, both in acute and chronic disease.

During the summer months young children fed partially or entirely on milk are liable to suffer from intestinal irritation and inflammation from this cause.

This is a matter which has engaged the thought of most medical men.

Dr. J. Lewis Smith pointed out the fact that in diluting cow's milk for babies' use, it was better accomplished by the addition of barley-water instead of water, the former making a solution of the casein rather than a mixture, and thus step by step these difficulties have in a degree been overcome. While much has been accomplished, perfection is not reached. Happily, as both the physiology and chemistry of digestion have become better understood, a more careful study of the

digestive ferments and their practical application has become established. Peptonized milk seems, in some good degree at least, to meet the required indications.

This can be accomplished briefly as follows: To a pint of milk raised to a temperature of about 100° F., not below the normal heat of the body, add five grains dry extract pancreatis dissolved in a little water; afterward stir into the milk fifteen grains potassium bi-carb. Keep the milk at the temperature already indicated until the addition of some acid—strong vinegar will answer—fails to coagulate a small portion of the milk removed for that purpose.

The degree to which the milk should be pancreatized will be best ascertained by its digestibility. It may require from fifteen minutes to an hour, or more.

This process may be arrested by boiling the milk, or, better still, that the temperature be lowered by putting it into a refrigerator and keeping it at a lower temperature, when it may be warmed for use.

The value of pancreatized milk seems to be that it is easy of digestion and assimilation, and it is almost entirely absorbed.

To a patient fed exclusively on milk given when alkaline or lime water has been added, the undigested curds may accumulate rapidly in the lower intestines, requiring frequent evacuations, greatly to the annoyance, and may be to the injury, of the patient.

In fact, common experience goes to show that much care is often required on these troublesome accumulations, if not impactions.

Milk when heated as suggested seems thinner, and is more acceptable to the taste and stomach, than clear milk, while its sustaining power is evidently increased. I give one or two examples of its use.

A young man recently under my care, suffering from general idiopathic peritonitis from blood-poisoning by sewer-gas, took from one to three pints daily, which was his only nourishment, save a little chicken-broth and cocoa. His stomach, though very irritable, tolerated the pancreatized milk after beef-tea had been repeatedly injected. His bowels were confined for a period of about ten days by the active exhibition of opiates, and allowed to move spontaneously on the subsidence of the inflammation. His strength was well sustained, and he made a prompt recovery, but notwithstanding the period of time which elapsed before the bowels were opened the fecal accumulation was small. I know of no other method by which the system could have been so well nourished.

Dr. Cornelius Alcott, of Brooklyn, related to me a very interesting and instructive instance of the supporting power of peptonized milk, in the case of a man passed middle life, suffering from scirrhus of the kidney.

The disease had reached a point where the stomach would tolerate neither medicine nor the food already used, and death seemed imminent, but life was prolonged for a period of more than two years by this diet alone.

During this time he suffered little or no pain, though the malignant growth filled a large portion of the abdominal cavity, and extensive secondary deposits had taken place.

In a patient now under my care, suffering from a suspicious omental growth, causing interrupted intestinal obstruction, in which there has been for days absolute incapacity of the stomach to take any food, a mixture of strong beef-tea and peptonized milk in equal quantities, as an enema, has been retained, and by it the patient has been fairly well nourished and his strength sustained."

Is Acetonemia the Cause of Diabetic Coma?—The Lancet (N. Y. Md. Record) says that, contrary to the observations of Patters in 1857, whose views have been accepted by subsequent authorities, Albertoni, writing in the Rivista di Chimica, Medica, e Farmaceutica, endeavors to show that acetone is not the poison which causes death in diabetic patients. Indeed, when administered by the mouth it is, if pure, less poisonous, he states, than ordinary ethylic alcohol. The phenomena observed in diabetic coma are by no means always similar to those produced by acetone. He gave large doses (one hundred

grammes) of glucose to rabbits, but could detect no acetone in the urine. Isopropylic acid is partly changed in the organism, acetone being formed; part of the acid is, however, passed unchanged. In man, when a dose of six cubic centimetres is given by the mouth, it is detected unchanged in the urine. Aceto-acetic ether does not produce symptoms of diabetic coma, but it does cause albuminuria and hemoglobinuria, and is certainly eliminated in an unaltered condition. From previous researches it seems evident that aceto-acetic acid often exists in diabetic urine, its presence being detected by the red color given with perchloride of iron if the urine is not boiled or treated with an acid. This acid is well borne by the organism, and cannot be the cause of severe poisoning. The condition which governs its appearance in the urine is the reaction of the urine and that of the renal parenchyma. If the urine is acid, the aceto-acetic acid is decomposed, forming acetone; but if alkaline, neutral, or slightly acid, the aceto-acetic acid is found unchanged. This is the explanation of the discordant observations on this subject. It is probable that the formation of aceto-acetic acid explains the presence of albumen, which is sometimes observed in diabetes. Crotonic acid, the formation of which in diabetes was demonstrated by Stadelmann, cannot be considered as poisonous, two grammes producing no effect on rabbits. Crotonic aldehyde is, on the other hand, highly poisonous, even in small doses, four drops producing in a rabbit dyspnea, and even narcosis, with the exhalation of an odor resembling crotonic aldehyde, and other phenomena which are described by Kussmaul as present in diabetic coma. Large doses caused powerful disturbance and rapid death, with epileptiform convulsions.

Cocainization of the Bladder.—Dr. P. Burns, of Tubingen, records in the Berliner Klinische Wochenschrift, No. 21, a case of lithololapaxy, in which the bladder and urethra had been rendered insensitive by cocaine. The patient had suffered from symptoms of stone for four years, and, on sounding, the stone was found to be hard and rough, and two centimetres and a half in diameter. There was also considerable purulent cystitis. As a preliminary measure the bladder was washed out with boro-salicylate solution; then twenty grammes of a two per cent solution of cocaine were injected into the bladder, and ten grammes into the urethra. By shifting the position of the patient the contact of the injection with all sides of the bladder was ensured. After a few minutes' interval the bladder was filled with the boro-salicylate solution, and the operation proceeded with. Owing to the hardness of the calculus thirty-three crushings were necessary, occupying twenty-two minutes; but during the whole period no pain was felt, although previously the patient had hardly borne the passage of a catheter. During the evacuation pain was experienced each time the bladder was distended, but the anesthesia had lasted for half an hour. Finally, a small quantity of a ten per cent iodoform glycerine solution was injected, with a view of protecting the abraded bladder from purulent absorption. The calculus, which was of the oxalate mulberry variety, weighed four grammes. A speedy recovery ensued.

Excision of the Hip.—The Cincinnati Lancet and Clinic gives a summary by Dr. William Alexander, at the close of an interesting paper upon excision of the hip, published in the Liverpool Medico-Chirurgical Journal.

1. That hip disease should in the earlier stages be treated by that absolute and perfect rest of the joint that we now appreciate so well and know so much better—thanks to Mr. H. O. Thomas—how to apply, without at the same time producing general debility of the system through the restraint and confinement necessary in former times to secure sufficient rest to the joint.

2. That this treatment, thoroughly and persistently carried out for a long period, will cure a very large percentage of cases of joint disease.

3. That unfortunately this treatment can

not or is not properly or persistently carried out among the poor, with whom a persistent attempt to carry out after a certain stage of the disease has been reached only leads in many cases to a useless limb after many years, and probably in a majority to death, either during the process of cure or soon after, from the exhausting effects of the local disease, and not, as some erroneously think, from an inherited constitutional debility.

4. That many of these patients could be saved by excising the joint when a decided second stage of hip disease has been reached, and that excision is most safely and advantageously performed by severing the femur above the trochanters, clearing out the acetabulum, and maintaining the opposing bones so far apart that their surfaces can resume a healthy condition, and the aperture between become filled up with fibrous tissue. By this means an excellent false joint is formed, or, if the adhesions become too firm, a good stiff joint.

5. That the advent of the stage of the disease suitable for excision is indicated by the repeated formations of abscesses and sinuses round the joint. Then excision, as described, seems to offer better results, both locally and generally, than rest and waiting to see what will turn up.

7. That when the supra-trochanteric mode of excision cannot be performed with any chance of success, on account of the extensive nature of the hip disease, the alternative treatment comprises either continued expectancy or amputation, according to the age and condition of the patient.

7. That it is, however, a great mistake to imagine that all softened bone or infiltrated tissue should be cleared away by the operator. All he has got to do is to clear a space where the operations of nature, in dealing with diseased or disabled tissues, can be carried out as easily and expeditiously as possible. The operator should remove all manifestly dead tissue, but bone and tissue that the surgeon would be inclined to sacrifice as doubtful should be left alone, as these will, under the same skillful hands of nature, be restored to health, or extruded harmlessly if only a passage for their extrusion be maintained.

Chloride of Zinc.—Simon Flexner, Ph. G., writes in the Louisville Medical News: Specialists who use this chemical are frequently annoyed by a seeming insoluble flocculent precipitate which separates when they seek to dissolve it. The nature of this precipitate and the best means of treating it so as to render it soluble and prevent a loss of a part of the chemical and a consequent weakening of the solution are frequently overlooked.

Chloride of zinc is a perfectly stable compound when in solution, but when it is evaporated to dryness it parts with a portion of its chloride, and absorbs a corresponding amount of oxygen. The resulting compound is an indefinite mixture of chloride with oxychloride of zinc—a soluble part and an insoluble part. On treating this compound with water the chloride dissolves while the oxychloride separates. This insoluble part, the precipitate above mentioned, is quickly converted into the normal chloride by the addition of the requisite quantity of hydrochloric-acid. As a rule a very small quantity of acid suffices, as but little of the chloride is converted into the oxychloride. It is a mistake to filter the clear liquid from the precipitate. Solution should always be effected as above.

Burns and Scalds.—The Western Medical Reporter treats of this subject as below:

"Dupuytren's classification of burns is into six degrees of severity:—1. Only inflammation of the skin. 2. Detachment of the epidermis and formation of blebs of various sizes. 3. Destruction of the cuticle and a portion only of the true skin. 4. Destruction of the true skin. 5 and 6. Muscles, tendons, nerve trunks, blood-vessels and bones are involved. The following are the requisites which Dr. Woodward lays down for a dressing for scalds and burns. It should—1st. Be comfortable to the patient. 2d. Diminish secretion from the affected part. 3d. Require to be renewed only at long intervals.

4th. Promote healing. The method of dressing adopted in the Bellevue Hospital, New York, is as follows:—Supposing the burn is one of the second degree, the blebs are cut open with scissors and evacuated, the detached epidermis being carefully cut away. Whilst this is being done, the affected member should be irrigated with some antiseptic solution. He condemns bi-chloride of mercury dissolved in water (1–2000) as harmful in many cases, and regards carbolic solution as dangerous where the burnt surfaces are extensive and irritative in their action, causing a large secretion of serum. He recommends Turche's antiseptic fluid; this contains five parts of boracic acid, one part of salicylic acid, and 500 parts of water; it is not very irritant, and is perfectly effective. He regards it as the best solution for the purpose. Having thoroughly cleansed and rendered the burned region as aseptic as possible, a layer of subnitrate of bismuth, thick enough to thoroughly protect the part, is dusted upon it. Over this, four or five thicknesses of carbolized or bichloride gauze should be wrapped gently. Over all, some antiseptic cotton is placed in a thick layer, and bound on gently with a bandage. This dressing should remain perfectly sweet for a week or two. Should serum come through it, after a day or two, more cotton and a bandage should be applied. The part is examined after a week or two, according to the size of the burn. Usually at the end of one week the burn is examined, and found healed throughout. If a change of dressing is required, it must be made under precautions similar to those observed in the first instance. In case of the third and fourth degree of severity, after thorough cleansing of the wound from sloughs and other dead tissue, he recommends free dusting of the tissue with boracic acid crystals, or covering it with boracic ointment (ʒj to ℥j) spread on antiseptic gauze. If the crystals are used, the part must be so treated, and in every instance the first or second application has been sufficient to check the spread of the disease. The only internal treatment was saline water or mixture.

A New Case of Cure of Ileus by Washing Out the Stomach.—Dr. Kuhn, in the Bulletin General de Therapeutique, (Medical News) reports a case of ileus cured by washing out the stomach.

The patient was a man, aged about 60 years, and for a year previous had been subject to colic with alternate attacks of constipation and diarrhea. For some time, however, these intestinal disorders had disappeared almost completely, when suddenly, on May 8, 1885, the patient was again seized with colic more violent than he had ever before suffered, and this in a short time was followed by vomiting. Dr. Kuhn was summoned, and found the patient suffering the greatest agony. The last matters vomited had a fecal appearance. Meteorism was considerable, and the hand applied to the belly easily distinguished the tumultuous movements of the distended intestinal coils. Very little gas escaped from the rectum. There had been no stool since the day previous. Nausea was persistent, and the temperature normal. Treatment was carried out as follows: An injection of warm water was made, and in an hour followed by a second, of about seven drams of castor oil, neither of which was followed by any result. At intervals of an hour, two hypodermic injections of one-sixth grain morphia were given, and for treatment during the night a potion containing one dram of chloral was prescribed.

In spite of the use of these drugs, the patient was restless during the whole night. The meteorism still persisted, as did also the nausea. Washing out the stomach was then proposed, and performed with a solution of soda bicarb. in a proportion of 3 to 1000.

The liquid did not return limpid until about two gallons had been used. The same evening, four or five hours subsequent to the treatment by irrigation, gas began to escape from the rectum, with consequent diminution of the meteorism. Though the improvement of the patient was very manifest, no movement of the bowels occurred, and, after waiting twenty-four hours, a second irrigation was made with water and soda bicarb., 6 parts to 1000. An injection of f ℥iss castor oil was

administered, and eight granules of strychnia sulph., each containing one-sixtieth grain, were given, one every two hours. The same evening, movement of the bowels occurred, the meteorism entirely disappeared, and the patient recovered.

CONTRIBUTION.

RADICAL CURE OF HERNIA.

BY R. E. HAUGHTON, M. D.

Professor Pathology, Operative and Clinical Surgery, Central College Physicians and Surgeons, Indianapolis, Indiana.

"I believe the time is coming when most cases of reducible hernia will be radically cured by surgeons, if not of this generation, certainly of the next." (Sir T. Spencer Wells).

This remark of the justly celebrated ovariotomist of London, has in it the elements of prophecy. In view of the fact, that now surgeons have fulfilled his prophetic statements, and much sooner than he anticipated, we get a view of the rapid progress which the art of surgery is making in this present time. Medical and Surgical science has made a wonderful revolution in progress during the last twenty-five years, and now, the grand success obtained in ovariotomy and cure of hernia, attest this process.

Through the ages past, surgeons have been endeavoring to cure hernia, not so much by trusses and supports, but by radical methods, but have only now and then achieved success. But since 1832, and during the decades which have followed, progress has been going on, and now is presented to the profession of Europe and America, a method of radical cure, so simple and yet so effective and certain, as well as safe, in competent hands, that we are first surprised then astonished, it had not been done long ago. In January, 1880, in a clinical lecture, by Dr. Jamny, at the Philadelphia Hospital, the more recent method was presented to medical students as the Heatonian method, which has been more fully described by Dr. Warren of Boston.

To Prof. Pancoast, of Philadelphia, however, belongs the honor of beiug the first, at least in this country, to effect a cure by a method called the subcutaneous method. In 1836 he injected iodine in thirteen cases of inguinal hernia, which are given in his work on surgery, all of which were cured. See also records of the Philadelphia Hospital, 1836. Still, these successes, by one of the ablest surgeons of this country, were not sufficient to make the profession recognize it, hence, other men have worked it out,and secured such success as to render it an operation of successful application, and fully recognized by leading surgeons in Europe and America.

Dr. Warren stands to this operation, in this country, much as the late Dr. Atlee did to ovariotomy. These two operations, now brought to a successful accomplishment, are two of the grandest and proudest results of this age, and both by American surgeons, one in Kentucky and the other in Pennsylvania. We cannot review what has been done in the past in this direction in working so grand a success; but, suffice it to say, that Velpeau, in France, Wood, in London, Pancoast, Heaton, Warren, are names which stand as stars in the galaxy of those surgeons who have aided in such distinguished success. This subcutaneous method marks an epoch in history. Radical and unique as the operation itself is, yet it is simple in kind. Velpeau says: "Sensible like other practitioners of a want for a radical cure for hernia, and convinced for a long time that we were wrong in abandoning, indiscriminately, all trials which had this object in view, I also endeavored to arrive at it by a special method, and this method was by the injection of iodine, first cutting down upon the parts." But since then, the method by injection into the rings, similar to the hypodermic method of medication, proves to be the most thoroughly successful of any method during any period of time. Strange to say that all the efforts of men, at different periods, were converging to one point, to a method which would close the rings permanently, and thus secure what all the other methods had failed to do mostly. The principal difficulty which rested on the minds of surgeons was the danger of peritoneal inflammation, and the almost absolute certainty that this result stood in the way of a radical cure. Not so, however, now that the nature of serous membranes are better understood, and, that, in the true method, we have nothing to do with the peritoneum, and do not excite or produce any trouble of the peritoneum. Also, since the true nature and process of adhesive inflammation has been better understood, it has been easy to understand the process of a radical cure for hernia. It is simply to close the rings (so-called) through which the hernia emerges from the abdomen, and this is done by ex-

citing a plastic exudation, which closes the rings and finally becomes organized into a fibrous or connective tissue, like to that which produces it. The cure is certain when this is accomplished. This is occasionly done by a well arranged truss; but this is a poor protection, while it does not even claim to cure only in such exceptional cases as produce sufficient irritation to close the rings by the plastic material which is excited by the irritation of pressure. All this presupposes that the hernia is reducible, capable of being returned within the abdomen, as this returns the parts to their original state or condition, so that in making an effort at cure we do not have to deal with the hernial sac or its contents, but simply with the openings and rings through which the bowels and peritoneum had passed out. The evolution or formation of the hernial sac is a matter of much interest to the anatomist and surgeon, in view of the fact of radical cure, and in view of the opinions which have been held upon that subject.

Demeaux, Paris 1817, says in his remarks as to the causes of hernia: "When the peritoneum begins to be depressed by the pressure of the abdominal viscera, it first shows a point of depression, then something like a funnel or infundibuliform, and finally a tube of a form similar to the fingers of a glove." The pressure dilates this process till a globular tumor is formed, which enlarges its way, especially at the two points called abdominal rings. Hence, it is a fact in existing hernias, that the peritoneal membrane is a covering, which is reflected or doubled upon itself as the tumor continues its descent. We only have to deal with this in irreducible or strangulated forms of hernia, and especially in the strangulated variety it becomes a question to decide whether you will open the peritoneal sac, or reduce it by incision of the constricting fibres of the ring, or the reflexion of the fascia in Poupart's, or Hey's ligament in femoral hernia, or at the falciform process of the fascia lata, where it emerges at the saphenous opening on the thigh. When strangulation occurs, relief by taxis or relief by the knife are the two means open to the surgeon and an operation often must be done at once, or relief comes only in death. The radical cure therefore, to such as have hernia in its various forms, comes, as an alternative infinitely to be preferred, to the risks of an uncured hernia, with a necessity for the use of a truss, or the greater risks and dangers of a strangulation which endangers and not unfrequently destroys life. The cure is easy and not dangerous when it is fully comprehended, and yet to the novice and ignorant, it is an operation fraught with danger in an eminent degree. The reasons for this are obvious enough to those who have studied the anatomy of hernia under the knife and need not be stated here. Before this most recent and yet most radical method had been fully established, men had essayed various methods of cure by incision, ligation by suture, and occassionally succeeded, but not unfrequently destroyed the lives of patients by the inflammation induced by the operative procedure. Hence, they have been more or less entirely abandoned in favor of the far more complete, simple, radical and safe method of subcutaneous closure of the rings which give exit to the hernia.

To the professional mind I need not describe the process of cure by an inflammatory process which may be called an adhesive inflammatory process, and is one of safety and not of danger, and is nature's method of cure, the same process as effected by a good truss. But trusses, as a rule, do not cure, and are not intended to cure, but may oceassionally effect the object.

Dr. Rush said: "Perhaps all the discoveries of future ages will consist in a new application of old or established principles, and in new modes of applying them, rather than the discovery of new theories or new methods." So it is here.

Another objection is urged to this method, that the plastic material which is obtained will be again absorbed, thus finally producing a failure to cure. The answer is, no more than plastic matter elsewhere, when necessary as reparative material, which is always homologous to the tissue in which it is produced. It may be regarded cicatricial, but it is permanent; in this case it closes rings, and becomes a bar to the hernia, henceforth. Hence, it is a cure and a radical one.

SOCIETY PROCEEDINGS.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

REPORTED FOR THE REVIEW BY WM. R. MORRISON, M. D., PHILADELPHIA, PA.

Ninth annual meeting held at the Indian Harbor Hotel, Greenwich, Conn., August 26, 27, and 28, 1885.

WEDNESDAY. MORNING SESSION.

The meeting was called to order at 10 o'clock, by the president, Dr. W. A. Hardaway, of St. Louis.

The first paper was read by Dr. J. E. Graham, Toronto, Can., and entitled, "A Case of Tuberculo-Ulcerative Syphilide of Hereditary Origin."

The patient was a girl twenty years of age. The skin of the forearm presents elevations and depressions, and in places it is covered with thin scales. The hand is not involved and the affection does not extend deeper than the sub-cutaneous areolar tissue. For three or four inches above the elbow, the arm is atrophied and covered with cicatricial tissue. At the upper border of the cicatricial tissue, there is an ulcer three-fourths of an inch wide, which encircles the arm. Above this there is sound tissue, no nodules are present. The left clavicle presents about its middle a swelling and ulceration about the size of a silver dollar. This was the result of a blow. There is no copper colored appearance. Investigation of the family history showed that the mother was apparently healthy. The father died from pneumonia when the patient was eighteen months old. It was subsequently learned that he also had syphilitic ulceration of the throat.

The treatment consisted in the local application of a mild mercurial ointment and the internal use of bi-chloride of mercury and iodide of potassium. The condition steadily improved, and in the course of six or eight weeks the ulceration had healed. The patient at that time passed from observation.

The speaker referred to the difficulties of diagnosis in this case as there was a complete absence of specific history, the facts in regard to the father not being learned for some time after the case had been under treatment. There was no history of any previous evidence of hereditary syphilis, but, taking all the facts into consideration, the doctor thought that there could be no doubt as to the correctness of the diagnosis.

Photographs showing the condition were exhibited.

DISCUSSION.

Dr. R. W. Taylor, New York.—It is now generally conceded that syphilis can be communicated to the child without infection of the mother, and I believe that I was the first one in America to call attention to this fact. I have seen this a number of times, and this has been the case where a most careful examination of the mother has been made, and the observations have been continued over a series of years. There is usually some indication of specific taint, but this may be so slight as not to excite notice or its exact import is not recognized. These may pass away and in the course of six months or a year the ulcerated lesions appear, but it is not uncommon for a child to go to the age of from six to eighteen years without exhibiting this condition.

Dr. C. Heitzman, New York.—Every one has seen cases similar to the one reported. I have seen such cases in which I was unable to determine at first sight the nature of the affection. The diagnosis lies between syphilis and scrofula.

Dr. Greenough, New York.—Within the past two months, I have seen a woman who has lost three children in succession from hereditary syphilis, yet she is strong and apparently perfectly healthy and has never shown any signs of syphilis. This woman has been under observation for six or seven years.

Dr. L. A. Duhring, Philadelphia.—There are certain cases in which it is almost impossible to express a positive diagnosis at first. The result of treatment in causing a rapid cure in the case described, would certainly incline me to the opinion that this was a case of syphilitic disease. I have, however, never seen a case recover so quickly.

Dr. J. N. Hyde, Chicago.—As regards the remarks of Dr. Taylor, I will say that I have seen cases which have convinced me that whilst it is not the rule, still occasionally syphilitic children are born where, so far as observation can be made, no evidence of syphilis in the mother can be detected. The women are usually pallid and weak, although there may be no symptoms which can be ascribed to syphilis.

I see inherited syphilis in infants constantly, but I have never seen inherited syphilis manifesting itself in advanced years. The more I see of syphilis, the more am I satisfied that in its origin heredity does not amount to very much. The accidental cases of syphilis are very common. I have seen the initial lesion of syphilis on the head of a penis where it was unquestionably due to inoculation from the finger of the surgeon in catheterization. I have no doubt that the case described was one of syphilitic trouble, and as Dr. Durhing has said, the result of treatment unquestionably points in that direction. There are no cases which yield so readily as old cases of untreated syphilis. As to pronouncing it a case of hereditary syphilis, my experience would not permit me to do so.

Dr. W. A. Hardaway, St. Louis.—I think that it is unwise to base our diagnosis on the results of internal treatment. Because a case gets well under anti-syphilitic treatment is not proof that the affliction is specific in its

nature. Local treatment is often all that is necessary.

Dr. R. W. Taylor, New York.—Dr. Hyde has made the statement that these women apparently unsyphilitic who have borne syphilitic children have in his experience been pallid and weak. I entirely disagree with him on that point. I find such persons in robust health.

The next paper was entitled "Clinical Notes on Psoriasis," by Dr. F. B. Greenough, New York.

The paper was founded on the records of 394 cases of psoriasis. This number occurred in about 15,000 cases of skin diseases examined and represented about two and one-half per cent. Several tables of statistics were presented showing when the cases first came under observation, and the age at which the attack was first observed. A large proportion of the cases was first attacked with psoriasis between the ages of ten and forty years. In ninety-seven cases the speaker has been able to get reliable evidence in regard to the family history. In thirty-one cases psoriasis had existed in a near relative, but in sixty-six cases, the patients felt sure that the disease had existed in no other member of the family.

As regards locality affected. Where there is much development, it is almost constantly found about the elbows and knees, and more frequently on the extensor surfaces than on the flexor.

Well marked cases are readily diagnosed, but in some cases there is considerable difficulty in making the diagnosis. It is most frequently confounded with some form of eruption resulting from constitutional syphilis. In psoriasis, however, the patch consists simply of epithelial cells and there is no hyperemia connected with it. In syphilitic eruption, the crust will contain other elements than epithelial cells, and on removal of the crust spots of moisture will be detected. A characteristic symptom of psoriasis of the scalp is a band of hyperemia, about three-fourths of an inch wide, extending round the forehead contiguous to the hair. This is a point of value in the diagnosis between eczema capitis and psoriasis. In the former affection this band is wanting. In eczema also, evidences of dried serum or pus will be found. Eczema is apt to extend to the ears. Psoriasis is not accompanied with enlarged post-cervical glands as is eczema. The diagnosis from favus is made by the age of the patient, evidences of destruction of the hair follicles in favus and the microscopical examination.

On the general integument, syphilides are most apt to resemble psoriasis. The region on which the eruptions appear is important. Psoriasis begins as a minute point of hyperemia which may last for several days. In maculose syphilide a crop of macules appear within twenty-four or forty-eight hours. When the eruption fades there is, in syphilis, a decided pigmentary change.

The amount of pruritus complained of in psoriasis varies, but it is rarely a prominent symptom, although in exceptional cases it is very severe. I have never seen any eruption on the hands or feet resembling psoriasis, with the exception of eczema, which was not syphilitic.

In regard to treatment, some cases do well, while others do not, There is no specific; what will benefit one case may make another worse. In my experience tarry preparations, especially the oil of cade, have been most efficacious. Great comfort may be afforded by the use of emollients. Cod-liver oil is one of best applications. Chrysarobin is a powerful remedy, but has the disadvantage of destroying the clothing. On the face and scalp it is apt to produce dermatitis. The internal administration of arsenic in some cases is of benefit. Even after apparent recovery there is great danger of relapse.

Dr. L. A. Duhring.—The reader of the paper in referring to the diagnosis did not allude to the difficulty sometimes experienced in diagnosing seborrhea capitis from psoriasis. I have found considerable trouble in the diagnosis, particularly in young girls. In these cases the eruption was confined to the scalp.

Dr. A. R. Robinson.—In regard to the diagnosis of favus and psoriasis, there is usually no difficulty. I do not agree with the author in regard to one of his points of diagnosis. In the early stage, you do not find moisture when the crust is removed. There is a shiny appearance. It is only in advanced stages that ulceration is present.

I agree with the speaker that it always occurs in small spots at first not covered with scales. I consider it primarily an affection of the rete. While it is true that psoriasis often disappears without producing pigmentation, yet there may be discloration found on the lower extremities particularly where there is a varicose condition of the veins. In some cases where there are only a few patches of psoriasis limited to the lower extremities, it is often difficult to make the diagnosis. Unless there is involvement of other parts of the body, or you have the history, it is often impossible to make the diagnosis. There are other cases of acute psoriasis which closely resemble acute eczema. In reference to the

palms of the hands, whilst we do not see cases of psoriasis limited to this situation, yet I am sure that cases have been shown in which the palms of the hands have been affected in connection with the other portions of the body.

Dr. J. C. White, Boston.—I agree with the previous speakers in regard to the difficulty of diagnosing between psoriasis of the scalp and seborrhea. In some cases the diagnosis can not be made for months. In all parts of the body, pigmentation may follow psoriasis, but never over large areas.

I should like to call attention to one termination which I have seen in three cases, and that is a degeneration into epithelioma.

Dr. R. H. Morrison, Baltimore.—I see a great many cases of psoriasis, and in our dispensaries we have a great many negroes under treatment, but I can only recall one or two cases of psoriasis in the negro. In such cases, there is a loss of pigment.

Dr. G. H. Fox, New York.—Too much stress is I think laid on the general rule that psoriasis occurs most frequently on the extensor surfaces, the knees and the elbows. It is a notable fact that in general psoriasis, the vicinity of the knee and elbow escapes. Many cases of psoriasis occur in weakly subjects—while on the other hand, many cases of eczema appear in robust persons. In every individual case, the better the patient's health, the less likely is he to suffer from a recurrence of the affection.

In the treatment of psoriasis I adopt the teaching of the late Tilbury Fox. He laid stress on the point that in psoriasis as in other inflammatory affections of the skin and also in lupus, the first thing to do is to lessen the congestion of the skin. I do this by restricting the diet. I do not devote special attention to the starch and saccharine elements of the food, but cut off the meat and order a diet of fruits and vegetables in the summer, and in the winter, give a carefully restricted diet. Tea, coffee, tobacco and stimulants of all kinds are to be cut off. By so doing more will be accomplished than is obtained by using arsenic and local applications at the start.

In regard to local remedies, I never use tar in the treatmentof psoriasis. With the application of chrysarobin made at the proper time, there is no necessity for the use of tar. I have seen many cases in which this drug did no good, but this was because the application was made when the patches of psoriasis were in a congested condition. If the acute congestion is lessened, chrysarobin will produce beneficial results.

Dr. C. Heitzman, New York.—One of the most important points after making the diagnosis is to decide as to the acuteness or chronicity of the affection. If it is acute, local applications are to be avoided. If the case is chronic, chrysarobin may be used with advantage at least temporarily. It is not a cure. I agree with Dr. Fox that restriction of the diet is important for the purpose of lessening the congestion. Tar can not be dispensed with. Chrysarobin remedies the disease for a time, but in a few months it returns. There is nothing like tar to prevent the recurrence. The disease will steadily grow worse.

Dr. W. A. Hardaway.—I believe that in psoriasis, we have a disease situated in the skin itself. It is frequently hereditary. The same sort of skin may be transmitted just as a certain color of the hair or of eye may be transmitted and then any exciting cause may develop the psoriasis. Traumatism is frequently the exciting cause. I have seen psoriasis follow eczema. It is not unlikely that in seborrhea of the scalp, there may be the development of psoriasis. Internal causes may produce it. I have seen the excessive use of oatmeal produce typical psoriasis.

In the treatment of psoriasis it is important to regulate the diet. I cut off meats and aid indigestion in all possible ways. As a local application, I believe that chrysarobin with salicylic acid is very useful in chronic cases. Arsenic is useful on account of its action on the skin. I have employed chrysarobin in liquor gutta percha and in gelatine paste. This treatment may be followed up by the application of sulphur ointment. In psoriasis of the scalp, sulphur is quite an efficient remedy.

Dr. Greenough.—I did not intend to cover the entire ground of psoriasis in my paper. The omission of a consideration of seborrhea was an oversight. In regard to pigmentation, I referred especially to those cases of psoriasis of the trunk which were most apt to be confounded with syphilides.

Cases of Angioma Pigmentosum et Atrophicum, by Dr. J. C. White, Boston.

Two cases were reported. The first patient was a young man seventeen years old, and a Russian Pole by birth. Freckles appeared on his face before he was two years of age. These increased in number until the age of six. When the teliengectasic condition first appeared is not noted. When seen, the patient was well developed and apparently in good health. He has, however, grown slowly and is now no larger than a boy of twelve.

The hair of the head is abundant and intensely black. The eyes are also black.

Present condition. Melanosis. The forehead and lower portion of the face are of a dark brown color, and on close inspection small spots of a darker color are seen. The whole trunk is as dark as the skin of a dark Spaniard. The scrotum is very black, and the penis and glans present dark spots. The arms and hands are thickly spattered. The legs are also affected. On the right thigh there is one spot of dark color, covered with rather long hair. The mucous membrane of the mouth and pharynx is free from melanosis.

The atrophic condition. On the right side of the face occupying one-half the surface is a sharply defined area of white cicatricial looking skin. Similar areas are seen on the other cheek, forehead and about the mouth. A few white spots are seen on other parts of the body. The sensibility of the affected areas is decidedly lessened.

Teliengiectasis. Over parts of the face, there are bright red spots, varying in size from a pin's head to a pea. They are most most noticeable in the atrophied portions. Within the lids, there are two angiomatous new growths. Several vascular twigs are also seen on the face. A few red points are found on the feneral surface.

The second case is a brother of case one, aged three years, born in New York. When eighteen months old, little colored freckles were noticed on the face. Since then the condition has been developing. His hair is dark brown and eyes are black. The face is covered with numerous dark brown freckles. The spots are so close together that at a little distance the skin has a uniform color. In some places, the spots are slightly elevated. The backs of the hands are covered with dark brown spots, elsewhere the skin is clear. There are no leucodermic spots and no angiomatous condition.

From a study of these cases, I conclude that in the beginning, the development of these spots can not be distinguished from ordinary freckles. Gradually the spots multiply until they involve a considerable portion of the skin. It is probable that seven years may advance without other manifestations of the disease. The teliengiectasic condition is probably secondary. In the first case it is most developed in the atrophic portion. It is probable in this case there will be hypertrophy of the epithelinm and final transformation into epithelioma. This has been the result in the thirty-three cases which have been reported.

DISCUSSION.

Dr. Taylor.—I think that there is a direct relation between the red spots and the macules. The history of the cases which I have seen have been first a rash, then the red spots and then the macules. In one case the teliengectasis followed exposure to heat.

Dr. White.—I recognize a great difference in this disease as described by various writers, but I must insist on the correctness of my own observation. The younger child has exhibited none of the precedent hyperemia which has been noted in some cases. The patient has been observed after exertion and when exposed to intense heat, but there has been no hyperemia. The same is true of the first case as far as known. In the second case, which is still developing, there is no elargement of the vessels.

Adjournment of morning session.

[TO BE CONTINUED.]

MISSISSIPPI VALLEY MEDICAL SOCIETY, (FORMERLY TRI-STATE).

Eleventh Annual Meeting, Evansville, Indiana, Tuesday, Wednesday and Thursday, September 8, 9 and 10.

ORDER OF BUSINESS.

1. Report of Committee of Arrangements, A. M. Owen, M. D., Chairman.
2. Reading Records of last meeting. Appointment of Committee on Credentials continued.
3. Report of Committee on Publication, G. W. Burton, M. D., and H. J. B. Wright, M. D.
4. Report of Treasurer. Report of Secretary. Reception of Members by invitation.
5. Call for Volunteer Papers.

CHAIRMEN OF SECTIONS.

Surgery—Dr. Wm. A. Byrd, Illinois.

Practice of Medicine and Pathology—Dr. Arch. Dixon, Kentucky.

Gynecology—Dr. Geo. J. Engelmann, Jr., Missouri.

Obstetrics—Dr. Geo. B. Walker, Indiana.

Therapeutics and Hygiene—Dr. J. F. Hibberd, Indiana.

Legal Medicine—Dr. Jacob Geiger, Missouri.

REGULAR PAPERS.

Cocaine Habit—Dr. Louis Bauer, St. Louis, Mo.

Excision of Tibia—Dr. J. G. Carpenter, Stanford, Ky.

Exploratory Incisions as a Diagnostic Procedure—Dr. W. A. Johnston, Danville, Ky.

Abdominal Surgery, with Report of Cases —Dr. Edward Borck, St. Louis, Mo.

Heart Tonics—Dr. Wm. M. Fuqua, Memphis, Tenn.

Paper—Dr. J. A. Octorloney, Louisville, Ky.

State Medicine—Dr. Pinckney Thompson, Henderson Ky.

Malarial Hæmaturia—Dr. H. T. Dixon, Evansville, Ind.

Intra-cranial Cephalhematoma—Dr. E. S. McKee, Cincinnati, Ohio.

The Personal Endowments of the Physician—Dr. H. H. Middelkamp, Warrenton, Mo.

The Relation of Mind to Matter—Dr. Amos Sawyer, Hillsboro, Ill.

Menorrhagia— Dr. T. S. Galbraith, Seymour, Ind.

Stump-water—Dr. ———, Mitchell, Ind.

Behind the Curtains—Dr. Incognitus, Indiana.

Pathological Changes in Dysentery—Dr. J. C. Pearson, Mitchell, Ind.

Three cases of Diseases of the Nervous System—Special Reference to Diagnosis—Dr. H. J. B. Wright, Olney, Ill.

Laparotomy—Dr. T. B. Harvey, Indianapolis, Ind.

Some Errors in Physical Diagnosis—Dr. Wm. Porter, St. Louis, Mo.

Puerperal Fever and Puerperal Septicemia—Dr. Geo. B. Walker, Evansville, Ind.

Biliary Calculi—Dr. F. S. Newcomer, Indianapolis, Ind.

International Medical Congress—The New and Old Committee. By a Member of the American Medical Association.

Nasal Stenosis—Dr. G. V. Woolen, Indianapolis, Ind.

Paper—Dr. Isaac N. Love, St. Louis, Mo.

Tetanus—Dr. W. A. Byrd, Quincy, Ill.

Surgery—Dr. W. F. Peck, Davenport, Iowa.

Paper—Dr. W. B. Stirman, Owensboro, Ky.

Dysentery—Dr. Andrew Sargent, Hopkinsville, Ky.

Antiseptic Dressing—Dr. A. M. Hayden, Evansville, Ind.

Cholo-Cystotomy—Dr. A. C. Bernays, St. Louis, Mo.

Lupus—Dr. J. B. Cook, Henderson, Ky.

Paper—Dr. N. M. Baskett, Moberly, Mo.

Progress in Medicine—Dr. Arch. Dixon, Henderson, Ky.

Esophagotomy, with case—Dr. A. M. Owen, Evansville, Ind.

Paper—Dr. Wm. Geiger, St. Joseph, Mo.

Difficulties attending Diagnosis and Treatment of Complicated Dislocations of Hip—Dr. N. F. Schwartz, Canal-Dover, Ohio.

A case of Perineal Section without a Guide, for Stricture of Urethra—Dr. J. A. Sutcliffe, Indianapolis, Ind.

Paper—Dr. A. B. Miller, Macon, Mo.

Sore Eyes—Dr. Chas. Knapp, Evansville, Ind.

Paper—Dr. Dudley S. Reynolds, Louisville, Ky.

NOTICE.

1. Reduced rates have been secured at the St. George Hotel and Sherwood House.

2. Arrangements for special rates have been made with the following railroads centering here, and their connections, as follows:

P., D. & E.
E. & T. H.
E. & I. (Straight Line).
L. E. & St. L. (Air Line).
O. & M.

Full fare coming and one-third fare returning upon presentation of Secretary's ticket.

The L. & N. will give reduced rates by securing certificate from local agents, stating that full fare has been paid coming.

3. Members are requested to be present at first session, as regular business will begin without delay.

4. Each session will be called promptly.

5. Papers are limited by rule to twenty minutes.

6. Time for discussion will be given after each paper or series of papers.

7. Authors unavoidably absent will send their papers to the Secretary during the first day of meeting.

8. All Physicians in attendance will, on arrival, apply for Certificates of Membership, issued by the Secretary.

9. Committee of Reception, M. Muhlhausen, M. D., J. W. Compton, M. D., B. J. Day, M. D., Chas. Knapp, M. D., and J. S. Gardner, Jr., M. D.

OFFICERS FOR 1885.

President, Dr. F. W. Beard, Vincennes, Ind.

First Vice-President, Dr. A. B. Miller, Missouri;

Second Vice-President, Dr. J. A. Sutcliffe, Indiana.

Third Vice-President, Dr. E. H. Luckett, Kentucky.

Secretary, Dr. G. W. Burton, Mitchell, Ind.

Ass't Secretary, Dr. H. J. B. Wright, Illinois.

Treasurer, Dr. A. M. Owen, Evansville, Ind.

The approaching session promises to be one of unusual interest, and as it is impossible to send programs to every physician in good standing, it is hoped that you will take upon yourself the trouble of aiding one of the best working medical societies in the country, by inviting all the medical society men to come with you and take an active part in its proceedings. We expect from two to three hundred doctors to be present.

SELECTION.

ADDRESS IN SURGERY.

Delivered at the Annual Meeting of the British Medical Association in Cardiff.

BY J. MARSHALL, F.R.S., F.R.C.S.,

Emeritus Professor of Surgery, University College, London; Consulting Surgeon to University College Hospital.

A Forty Years Retrospect.

Mr. President and Gentlemen.—Assuming that on such an occasion as the present my discretion is entirely unfettered, and feeling anxious to avoid wearying my audience with a formal essay, I have chosen for the subject of the Address in Surgery, which I have the honor of delivering here to-day, a comparative view of surgical practice, as I myself observed it when acting as dresser under Robert Liston in the wards of University College Hospital, and of such as now prevails amongst us, particularly as exemplified in my own wards in that institution.

I at first contemplated, for the purpose of this comparison, the selection of the years 1843 and 1883, moving back from the last named date, because it coincides with that of the latest of our surgical registrar's reports, compiled by my former house-surgeon, Mr. Victor Horsley. But, on searching the old-case-books, I found that, in the medical year 1844–5, I was myself one of Liston's dressers, and accordingly I resolved to compare that year with 1883, which two years, in fact, constitute the first and last of a series of forty. I soon found, also, this advantage, that the perusal of my own descriptive notes, and those of my contemporaries, brought back vivid remembrances of the most important cases then under treatment.

It gave me great pleasure to discover that two of my old and yet surviving friends, James Hakes, of Liverpool, and George Yeoman Heath, of Newcastle, were acting as Liston's house-surgeons in the year selected, and that amongst my fellow-dressers were Henry Wiglesworth, of Ashford; John Newton, of Liverpool; the late Thomas Atchison, of the Indian Medical Service; F. W. Marshall, of Brundall, near Norwich; and Wm. Cadge, of that city. It is with equal pleasure that I mention here the excellence and value of their reports.

Whilst limiting my comparison as to period and locality, and to events more or less within my own cognizance, I hope to be able to direct your attention to numerous points of practical interest, whilst occasionally generalizations need not be excluded.

I propose to take up, in order, the following subjects: 1. The numbers of the cases, and the character of the diseases and injuries treated in the two selected periods; 2. The methods and means of investigation employed, whether clinical or pathological, for the purposes of diagnosis; 3. The treatment of the cases, understood in its widest sense, hygienic, dietetic, and curative; 4. The results obtained, as indicated by such factors as the duration of the treatment in the wards, the progress of the cases, and the relative mortality.

In dealing with these questions, either exact figures are given, or, when general statements are introduced, they are founded on the best attainable data.

1. The Numbers of Cases, and the Character of the Diseases and Injuries to be Compared.—In the year 1844–5, 284 patients were admitted into Liston's wards (excluding eye-cases); of these, 196 were males, and 88 were females. In 1883, there entered my wards 396 patients, of whom 223 were males, and 171 females. Liston's cases constituted about one-half, whilst my own formed only about one-third of the total number of patients received into the surgical wards.

In both sets of cases, fractures of various kinds, chiefly of the lower limbs, reached a very high number; next to these, especially in the earlier series, were wounds of the soft parts, chiefly affecting the head, neck and upper limb. Burns and scalds were few in each period. Malformations of the lips, palate, fingers and foot, were more numerous at the earlier date; but, as might be expected, genu valgum is not mentioned. New growths, though actually more numerous, were not relatively so in the later period, the proportions of these to the total number of cases being about 7½ per cent in 1844–5, and only 7 per cent in 1883. There is, however, a marked increase in the epitheliomata, though

scirrhus and sarcoma remain the same; whilst fatty tumors are more numerous in the earlier period. Of course, the numbers contrasted, twenty-one and twenty-six, are too small to furnish evidence either way as to the commonly supposed increased prevalence of cancer amongst our existing population. The widespread and well grounded belief in the value of the early removal of all new growths, and the more ready submission of patients to operations now rendered painless by anesthetics, must here be taken into account, as tending to swell the later numbers. Cases of venereal disease were formerly much more freely admitted into the wards of a general hospital than now, and, accordingly, are more numerous at the earlier date. Ordinary abscesses and ulcers are equally represented at the two periods. Gangrene was, and is, rare. Diseases of the joints, and also diseases of bone, are abundantly represented in each set of records; but, in the later period, cases of caries particularly abound, probably owing to the greater success of modern operative interference. Fistula in ano and stricture of the rectum are mentioned in both the early and the later lists; but it is remarkable that not a single instance of operation for hemorrhoids occurred in Liston's wards in the year in question. Diseases of the rectum, however, were at that time marked subjects of the specialism founded by Von Butchell. Strangulated hernia, calculus, stricture of the urethra, and affections of the testicle, are met with, though in varying proportions in both lists; but cases of stricture especially are now more frequently admitted as in-patients for the purposes of the so-called radical cure. A single case of ovarian tumor, one of vesico-vaginal fistula, and one of aneurism, occur in Liston's set of cases; but the last named disease is now comparatively rare, and the two former evils are usually relegated to special hospitals. The eye cases, which were received into Liston's wards, included strabismus, staphyloma, and cataract, for all of which he operated successfully. It would be a mere parade of knowledge to enumerate the numerous modern operations, such as osteotomy, colectomy, nephrectomy, and many others, which, of course, did not occur in Liston's experience.

As to the various forms of specific inflammations, and their consequences, which are now classed together as septic diseases, and which have long been the bane of surgical, and especially of hospital surgical practices, it is well known that they were not so clearly differentiated in 1844-5 as they are at the present time; but it is evident, from a study of the hospital records of the older date, that they were then extremely prevalent. Indeed, the chief lessons to be drawn from the facts I have undertaken to review relate to this class of diseases.

2. Comparison of the Methods and Means of Investigating Surgical Disease Forty Years since and at the Present Date.—In 1844-5, the finger, the educated finger, passed down the throat, or up behind the soft palate, was used to explore parts now examined by the laryngoscope or pharyngoscope. The convenient specula, which we now possess for various internal examinations, were then but rudely represented. There was no endoscope, and above all, no ophthalmoscope. The place of the modern aspirating syringe was but imperfectly supplied by the exploring needle or trocar. Means were not then devised for measuring variations in the corpuscular and chemical elements of the blood in disease and in convalescent states. The presence of albumen and sugar in urine was, no. doubt, easily and commonly detected; but quantitative determinations of those substances were troublesome and difficult to make, or were left unattempted; and the same is true in regard to such normal urinary constituents as urea and the chlorides, sulphates and phosphates.

The clinical thermometer was not in use; yet truth to say, it had been suggested as far back as the 17th century by Sanctorius, and was actually employed as a measurer of the strength of fever, by De Haen and Dr. James Currie, at the end of the last century. But though the thermometer was not employed in Liston's time for ascertaining the temperature of the body generally, it is interesting to note that, in a case in which he tied the external iliac artery for aneurism, exact observations on the temperature of the two lower limbs were made by aid of that instrument.

In the absence of this now ubiquitous clinical registrar, on the indications of which we justly set so high an estimate, great care was then taken to note other signs of the febrile condition. Hence, in Liston's case books, are to be found constant and minute records of the state of the skin and tongue; of that of the pulse and breathing; of the occurrence of rigors and sweatings; of the supervention of delirium; of the quantity, character, and specific gravity of the urine; and of the occurrence of albumen in that fluid. In these respects, the notes upon the cases are for the most part perfect. There are also occasional stethoscopic observations; but there are no sphygmographic pulse tracings. The elaborate temperature-charts and diagrams of the present case books are necessarily absent; so,

likewise, the electric and other tests, applicable to the detection of diseased conditions of the muscular and nervous systems, are entirely omitted.

Forty years ago, the microscope had just come into use for pathological, and therefore for clinical, observation. Liston's intimacy with Dalrymple, Gulliver, and Kiernan has its scientific as well as its social side, and served to stimulate his interest in microscopic investigations. He possessed one of the best and most powerful instruments of that day; and, as I know from having had the privilege of assisting him, he was particularly interested in the character and mode of growth of new vessels in granulations and elsewhere, in the structure of tumors, the constituents of cancer-juice, the seat of the pigment-granules in melanotic tumors, the presence of the spermatozoa in the fluid of certain hydroceles, and in many other facts of micro-pathology. The researches of Mueller were then becoming familiar; but the further labors of Schwann and Schleiden, of Addison and Augustus Waller, of Virchow and Cohnheim, and of many others, had to be made generally known before the grand microscopes of the few were supplemented by the clinical microscopes of the many, which now, indeed, are in daily use in every hospital ward. Liston's Elements of Surgery (last edition, 1840), though beautifully illustrated by Wm. Bagge, contains only one solitary woodcut devoted to a microscopic object—namely a cluster of red blood-corpuscles, represented upon a scale of squares, without a single white blood-corpuscle amongst them. What a contrast to the countless illustrations of minute structures, organisms, and crystals, scattered through the pages of the modern text-book!

It is not surprising that the older case-books contain no account of the microscopic structure of morbid growths, or of the minute constituents and deposits of diseased fluids—much less any illustrative sketches of either; whereas, in the modern case records of 1883, pen and ink drawings constantly occur, more especially, it must be admitted, representative of the larger facts of size, shape, and other obvious characters. Formerly, we find, in the notes, a mere statement that such and such a growth "exhibited the usual characters" of a fatty, sarcomatous, or scirrhous tumour; now, those characters, when necessary are fully described, or, it may be, actually figured. Permit me here to emphasize the importance to the medical student of the art of drawing accurately, and to express my gratification at the contrast between the useful sketches which serve here and there to illustrate the pages of my own case-books, and the funny caricatures of the features of my old surgical master which decorate the covers of his.

As a natural consequence of the improved methods and means of pathological and clinical observation which we now possess, the notes by the clinical clerks have become more ample. Indeed, I find that the average space now allotted to each patient's history and record is twice what it formerly was; and this is independent of the temperature chart or charts now affixed to every case, of occasional diagramatic curves, and of certain hygienic tables, in which are recorded the septic or aseptic condition of every wound in a ward, and the concurrence or absence of serious infective disease. Nevertheless, as I have already hinted, the older notes are usually full and intelligent in all particulars to which they relate, and, as the duties of dresser and clerk, now assigned to different students, were, forty years since, performed by the same person, the observation and the description of characters and symptoms were the work of the same mind, and thus they probably gained an exactitude and completeness.

At the same time, the effect of the non-use of the microscope for purposes of diagnosis may perhaps be recognized in the application of the terms "ichthyosis" and "warty growth" to what would seem to have been, the one a dry epithelioma of the lower lip, and the other a papillary epithelioma on the margin of the tongue, both of which, however, were successfully excised. Of six cases of "lupus," so-called, it is almost certain that two at least were carcinomatous. Again, the obvious appearance of a growth named "medullary sarcoma" of the tibia, and those of a "fungus hematodes" springing from the skin of the forearm, are admirably depicted in words; but there is, of course, no recognition of the modern nice discriminations between the different forms of sarcoma, or between a soft sarcoma and an encephaloid cancer. Different morbid conditions of the kidney could not then be indicated by the various kinds of casts or other deposits in the urine; nor, lastly, were the numerous phenomena of disturbed sensation and motion, which enable us to determine the nature, and even the locality, of certain lesions of the brain and spinal cord, capable of being recorded. It would, indeed, become tedious, were to I recount all the references in the case-books of 1883, which serve to show the great advance which has been made in the methods and accuracy of surgical diagnosis since 1844-5. But it is in regard to the questions which next arise,

namely, those which relate to the treatment followed in the two periods, that the contrast I have attempted to institute deepens in interest and in force.

3. Comparison of the Treatment adopted in University College Hospital, at the two selected Periods, considered in reference to Hygienic Conditions, General Comforts, Diet, Medicines, and Surgical Appliances.

A. Hygienic Conditions.—In 1844–5, the north wing of the Hospital not having been built, the surgical wards were much crowded; whilst, in 1883, in spite of an increase in the total aggregate of patients, the numbers in each ward were diminished, and the cubic space per bed proportionally increased. In the presanitary period of forty years since, sculleries and water-closets were but imperfectly separated from the wards; whereas now their separation is complete. Formerly, the doors, windows and chimney-flues furnished but intermittent means of ventilation; now, suitable channels, both inlets and outlets, are provided for the constant renewal of the air in the wards. Besides this, a laundry has been expelled from the basement, whilst that and all the corridors are now efficiently ventilated. The traps and drains are also maintained in good order. It is true that, in 1844–5, the Hospital had only been built ten years, and so far was relatively freer from the dangers of so-called hospitalism than now; but, to meet such contingencies, the walls of the wards have been recently lined with an impervious cement, which is regularly painted; whilst the floors are kept carefully purified. Lastly, in the good old times, there were no special isolation-wards for infectious diseases; whilst now there are special erysipelas-wards for both sexes.

B. Diet and General Comforts.—It cannot be doubted that quite as great attention is now paid to the question of diet as was formerly the practice; and, as all hospital committees well know, the expenses of general maintenance have increased. In the year 1844, for example, with a total number of 1,410 medical and surgical in-patients, the total general expenditure of the University College Hospital was £4,976, whereas in 1883, with 2,849 in-patients, it was £19,822; so that, whilst the number of patients is doubled, the total expenses of the establishment are multiplied fourfold. We may safely conclude that a certain share of this large increased expenditure arises from a bountiful attention to the dietary of the in-patients. As regards the personal care and comforts bestowed upon these patients, it may be pointed out that the salaries of nurses and domestics, which were somewhat more than £1,600 in 1844, amounted to £2,300 in 1883. Finally, it is with sincere expressions of gratitude to the Sisterhood who now so solicitously watch over the nursing and general economy of the wards, that one alludes to those numerous manifest improvements, which conduce not only to the comfort and cheerfulness, but to the well doing and speedier convalescence of the inmates.

C. Medical and Surgical Appliances.—In 1844, the total expenditure on medical and surgical stores for the hospital was £643, but in 1883 it amounted to £3,239; that is, the number of in-patients having become double, the cost of their medical and surgical treatment has been multiplied five times. The payments for medical stores alone amounted, in the two periods, to £437 and £1,474, showing an increase in the ratio of 3.3 to 1; but those for the surgical stores (exclusive of instruments) were, at the two periods in question, £206 and £1,765, making an increase of eight to one. Of this last named large sum, no less than £1,273 is specially set down to payments for "antiseptic dressings," of which, of necessity, by far the larger proportion was employed on in-patients. This great cost of the antiseptic system, as it is carried out at the University College Hospital, is a startling financial fact; but, if the results can be shown to justify the outlay, such expenditure is in itself highly to be approved. It is obvious, moreover, that the public, which provides the needful funds, ultimately reaps the benefit of that, as of all other improvements. Wealthy donors should remember this, in meting out their contributions to hospital resources.

The constant use of anesthetics, not merely in operations, but for the purpose of more thorough, and otherwise painful, examinations in cases of injury and disease, greatly increases the relative cost of hospital maintenance at the present day. In 1844–5, these were yet unemployed; although it was Liston himself who, two years later, was the first in this country to perform an important operation under their influence. For it was in 1846 that he amputated through the thigh the lower limb of a man, put into a condition of insensibility by the vapor of ether, administered by the late Mr. Peter Squire, in the presence of the late Sir John Forbes, the then editor of the British and Foreign Medical Review. Liston's surprise and gratification when the patient, having recovered consciousness, refused to believe that his limb was off until it was shown him, is still well remembered by spectators of the scene.

Beside antiseptics and anesthetics, to which we may add hypodermic injections, many new and expensive medicinal preparations are now ungrudgingly used in every hospital. Improved instruments for the performance of long established operations, and innumerable and ingenious clamps, cauteries and other novelties for the accomplishment of new and difficult surgical proceedings, are also freely provided for the modern hospital-surgeon and his patients. The cost of these at University College Hospital has doubled since 1844. In a word, it may be unhesitatingly affirmed, that the means, as well as the methods of surgical treatment, whether hygienic or curative, were, in 1883, far in advance of those which were available forty years before that date.

[TO BE CONTINUED.]

ITEMS.

—The Medical Chronicle, a successful monthly medical journal edited by Dr. George H. Rohé, of Baltimore, has become consolidated with the Philadelphia Medical Times.

Dr. Rohé will hereafter be associated in the editorial management of the Times, and will pay attention particularly to giving Baltimore and Washington medical matters greater prominence in its pages than they have hitherto received.

In token of its increased scope and non-sectional character, the word "Philadelphia" will be dropped from its title at the end of the current volume in September.

—The People's Health Journal is the name of a new Chicago journal. It is a monthly devoted to health, hygiene and preventive medicine.

—The Third Annual Meeting of the American Rhinological Association will be held at Lexington, Ky., October 6, 1885. Papers and discussion will be devoted exclusively to the diseases of the nasal passages and their sequences.

Officers for 1885.

President, P. W. Logan, M. D., Knoxville, Tenn.; First Vice-President, A. DeVilbiss, M. D., Toledo, Ohio; Second Vice-President, J. A. Stucky, M. D., Lexington, Ky.; Recording Secretary, C. A. Sims, M. D., St. Joseph, Mo.; Librarian, N. R. Gordon, M. D., Springfield, Ill.

Council.

J. G. Carpenter, M. D., Stanford, Ky.; H. Jerard, M. D., East Lynne, Mo.; H. Christopher, M. D., St. Joseph, Mo.; E. F. Henderson, M. D., Los Angeles, Cal.

Information concerning the full programme, membership, papers, attendance, etc., may be learned from any of the above officers of the Association.

—The Wilbur School and Home for Feeble Minded Children at Kalamazoo, Michigan, was opened for the admission of inmates on Monday, August 3, 1885. All who wish to enter the present school year should make applications to Dr. C. T. Wilbur, Kalamazoo, Mich.

—The Twenty-Fifth Great St. Louis Fair opens Monday, October 5, and continues for six days. The revision of the preminm list, which has just been completed, contains 24 departments and $73,000 is offered in premiums. The management are erecting 700 new horse stables, 500 cattle stalls, 800 sheep and swine pens, a poultry house for 3,000 fowl and nineteen exhibition halls in addition to those already upon the ground. The Veiled Prophets will parade Tuesday, October 6, and the Trades Procession Thursday, October 8. The streets will be illuminated by electric and calcium lights together with 150,000 jets. $400,000 has just been expended on improvements and 65 acres added to the ground. Races will be given over the new mile track every day during Fair week. Two car loads of lions, tigers, monkeys, tropical birds, herbivorous animals and venomous reptiles, will be added to the Zoological Gardens as a special attraction to the Fair. A rate of one fare for the round trip has been made by all railroads running within 500 miles o St. Louis.

Any of our subscribers desiring a copy of the premium list will receive one free by addressing Festus J. Wade, Secretary, 718 Chestnut street, St. Louis, Mo., and stating they are subscribers of this paper.

—A Calmative for Teething Children.—M. Vigier ("Gaz. Hebdom. de Méd. et de Chir.") gives the following formula of a sirop de dentition.

Hydrochlorate of cocaine - - -	1½ grain
Tincture of saffron - - - - - -	10 drops
Syrup - - - - - - - - - - - -	2½ drams.

The painful gums are to be gently rubbed with this syrup several times a day.—N. Y. Med. Jour.

—For the Cure of Corns.—M. Vigier recommends the following: Salicylic acid, 15 grains; alcoholic extract of cannabis indica, 7½ grains; alcohol (99 degrees), 15 minims; ether (62 degrees), 37½ minims; flexible collodion, 75 minims. Mix and preserve in a closely corked vial. The corn is to be painted thoroughly with this mixture every second day for a week. At the end of this time, it is said, the corn can be readily expressed by pressure of the fingers.—Med. Rec.

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MEDICINE AND SURGERY.

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TO OUR SUBSCRIBERS.

It affords us great pleasure to recognize the promptness of our subscribers in responding to our drafts. Out of over 5,000 which we have made there were comparatively few that were not honored, and, what is better, but few desire the REVIEW stopped, and these few seem to take exception at drafts being made on them, as though such a method was not legitimate and customary, and that we made a specialty of them. Again, some few thought we should not have continued to send the journal, because they had not renewed their subscriptions. To such we would say, a renewal of subscription is not necessary. The Postal Law makes it incumbent that they should pay for the journals as long as they receive them at their respective postoffices.

This seems to us only right, since they have had the use of the journals. However, we have no disposition to take advantage of this law. It is not our desire to cause offence; but we trust our patrons will all continue to receive the REVIEW and have full value for the small sum invested, and thereby assist in sustaining a Western Weekly Medical Journal and a Western Medical Publishing House. And that not only by their patronage, but by contributions as well, which we here solicit. Many of our Western physicians have very interesting cases in practice which should be reported in this journal.

It is the determination of both the editors and publishers to enhance the literary work of the REVIEW during the present year. Why not have a Western Weekly equal in all respects to any journal in the East? This is our ambition, which we are fully determined to accomplish, with the co-operation of the Western practitioners.

In conclusion, we trust that any who have taken exception at our making drafts on them, and who have paid same, and taken offence, and concluded to stop the REVIEW — will reconsider and continue. As for the few who have not honored our drafts, we hope they will at once remit the amount due, remembering it costs money to publish medical journals. We have standing on our books over $30,000 due on our five journals alone, which accounts for our making drafts on all our subscribers. No publishers can carry such a large amount for journals alone. Although the amount of each subscription is small, still the aggregate to us is large.

We thank all our patrons for past considerations, and hope for a continuance.

EXTIRPATION OF HIGH RECTAL CANCER.

At the meeting in April, 1885 of the Fourteenth Congress of German Surgeons, Kraske, of Freiburg, reported on a method he had devised and executed that makes it possible to get at such rectal cancers, that, as Volkmann puts it, "are too low down for laparotomy, and too high up for removal from below." The paper is reported in the Centralblatt f. Chirurgie.

Kocher proposed and executed removal of the os coccyx in such cases, and thereby gained considerable room for manipulation. In order to reach growths that are inaccessible even when this has been done, Kraske made a number of dissections. He found that the highest portions of the rectum can be reached after partial resection of the os sacrum. He placed the subject upon the

right side and divided the soft tissues by an incision in the middle line from the second sacral vertebra to the anus.

The parts are then dissected off as far as the left margin of the sacrum. The os coccyx is cut out and the ligamenta tuberoso-sacrum and spinoso-sacrum are severed at their sacral insertion. If now the parts are dragged to the left the rectum will be freely exposed. In order to get at the highest parts Kraske chiseled off a portion of the left lateral mass of the sacrum. He divides the bone in a line starting at the left margin at the height of the posterior foramen of the third sacral vertebra, passing thence through the posterior foramen of the fourth vertebra and thence to the left inferior cornu. Thus no important nerves are severed; the ventral branch of the third sacral remains intact.

The exposure is then so perfect that total removal up to the flexure is made possible, as well as resection of the upper parts in the continuity of the gut.

After Kraske had operated by this method on the cadaver of an old man that had died of a high cancer that had perforated the bladder, and found the removal comparatively easy, he practiced the method in two cases.

The first was a woman, 47 years old, with a cancer that began 4-5 Cm. above the anus, and the upper margin of which could not be palpated. After preparation and dissection as above described, the rectum was amputated at a point where there was complete peritoneal investment; the outer sphincter was preserved.

The second case was a male, 37 years old; the lower border of the growth was 12-15 Cm. above the anus, the upper margin could not be determined. After dissection as above shown, the rectum was amputated at its uppermost part; the lower, healthy portion was saved and partially sutured to the bowel above. This lower portion, which had been split behind, was left open and subsequently closed by a plastic operation.

Nothing occurred to disturb convalescence.

Kraske says that a great advantage of this method is the ease with which hemorrhage can be controlled. In especially bad cases he thinks that even more of the bone could be removed, and the canal of the sacrum might be opened. The sac of the dura does not reach so far down, and he does not think that injury of the filum terminale would be a serious matter.

The Relation of Tuberculosis and Vaccination.

The opposition of the anti-vaccinationists is principally founded upon the alleged dangers of the transmission of disease in the process of inoculation of vaccine-lymph. Notwithstanding the volume of the evidence is against such possibility, and although no single authentic instance is on record regarding vaccinal tuberculosis, still we must encourage patient research made to the end of proving such apprehension entirely unfounded. The results of the experiments of Villemin and the discovery of a specific micro-organism of tuberculosis by Robert Koch anew made the question of the possibility of tuberculous transmission by vaccination one of urgency. Dr. Strauss in the "Gazette Hebdomadaire de Médicine et de Chirurgie, 9, 1885," presents his experimental results. He refers to a report made by Toussaint to the "Académie des Sciences" in 1881. Toussaint took lymph from the vaccine sore of a healthy child and inoculated a tuberculous cow. The result was a "take;" and with the contents of the pustules that developed in the cow, four rabbits and one pig were vaccinated. The pig and two of the rabbits became highly tuberculous. This result seemed a striking demonstration of transmissibility. Vulpian would not admit this single experiment as conclusive, especially since rabbits and pigs are very susceptible. In 1882 Lothar Meyer wrote in defence of humanized lymph and denied a priori the possibility of tuberculous infection in this wise. He vaccinated eleven phthisical patients and could not find any tubercle-bacilli in the pustules that developed.

Dr. Strauss in 1884, following Meyer's ex-

ample, vaccinated phthisical patients with bovine lymph; in five cases he obtained true pustules. He failed to find any bacilli in the contents of the pustules, and inoculationin to the anterior chamber of the eye of rabbits was negative in result.

Josseraud published similar experiences in an inaugural thesis in Lyons. He examined vaccine-lymph of fourteen consumptives and introduced it into the peritoneum and the subcutaneous tissue of guinea pigs. His results were also negative.

For these reasons Strauss asserts that the danger of transmission of tuberculosis by vaccination is very problematic, the more so inasmuch as the lymph is usually taken from young children,who are rarely tuberculous, or, better still, from calves of recognized stock and health.

Furthermore, the method of vaccination is not favorable to the introduction of the tubercle-bacillus. Chauveau and Bollinger have stated that superficial abrasions do not admit the bacillus. To test this point more fully Strauss experimented upon guinea pigs with tuberculous sputa. He operated upon six series of three guinea pigs each, in the manner that one in each series was inoculated hypodermically or by intraperitoneal injection, and the other two upon a number of erosions or superficial scarifications. The result in each series was that the two animals inoculated after the ordinary manner of vaccination escaped and the first animal invariably became tuberculous.

In regard to bovine virus and its purity Strauss states that of 23,320 calves killed at the abattoirs of Augsburg, not one was found to be tuberculous; in Munich in a large number 0.0006 per cent only were tuberculous.

That the successful introduction of the bacilli leads to but a localized infection would appear from the case reported by Tschernig in the "Fortschritte der Medicin." A servant while removing the sputa cup of her phthisical master accidentally broke it and cut her finger, drawing blood. At the point of injury a nodule developed; three months after the cubital and axillary glands became indurated. The nodule on the finger and the involved glands were removed and found to contain true tubercles and bacilli. The girl, however, has been in good health since.

Turpentine in Diphtheria.

Dr. Demlow urges the efficacy of oil of turpentine in diphtheria, in an article published in the "Allgemeine Medicinische Centralzeitung, 5, 1885." He asserts that the tardy recognition of the virtues of this drug is due to its having been generally ignored by the clinical teachers and others having an extensive material for observation.

The doctor orders turpentine with Hoffmann's anodyne in the proportion of four parts of the former to one of the latter, and administers two to three teaspoonsful a day. Adults and half-grown children are to take one tablespoonful of the mixture as a first dose. Attention is called to the resistance offered by the patients to the disagreeable mixture. This must be overcome by energetic perseverance on the the part of the attending physician. As soon as the beneficial results are apparent, and thus confidence has become established, the family readily consent to continue the drug.

Milk is to be taken after each dose to relieve the severe burning in the throat. The membranes begin to detach themselves in twelve to eighteen hours, and on the second day improvement is marked. Nephritis has never followed this course of treatment; some diarrhea usually occurs. The floor and walls of the room, the bedding, etc, should be sprinkled with turpentine in order to lessen the possibility of contagion.

The Microbe of Syphilis.

It would appear that the proof of a specific organism of syphilis is a most difficult matter. Lostorffer, of Vienna, made a grand fiasco with his corpuscles, and Lustgarten, who recently discovered a bacillus that was of a peculiar behavior in its staining reactions, and

claimed it was the pathogenic microbe of syphilis, is already being crowded by critical inquiry. On page 462, vol. xi., Review, we described Lustgarten's process.

We learn from Le Progrés Médical, Aug. 22, 1885, that Mm. Alvarès and Tavel investigated Lustgarten at the instance of Prof. Cornil. They found a bacillus closely resembling Lustgarten's in the normal secretions, and in pathological but non-syphilitic secretions of the genital organs and about the anus.

On account of the identity in so many respects they intend to follow up the matter, and promise to make a full report in the October number of the "Archives de Physiologie." They summarize their results up to the present time as follows:

1. There exists in some of the normal secretions a bacillus heretofore not known.

2. This bacillus is identical in form and color-reactions with that which Lustgarten has designated as peculiar to syphilis.

3. It is possible that the bacillus that Lustgarten found in sections of syphilitic tissue and in syphilitic secretions is nothing more than this ordinary bacillus.

4. Our bacillus bears a resemblance in form with the bacillus of tuberculosis, and some color-reactions are identical with some that have been held as peculiar to the tubercle- and lepra-bacillus.

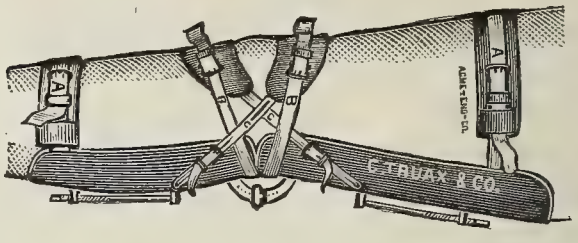
5. It is distinguished from the bacillus of tubercle by being less thick and less granular in appearance. These conditions are difficult to determine in casual examination. Further, our bacillus is less resistant to alcohol after fuchsin and nitric acid treatment. It can be distinguished from the tubercle-bacillus by the failure to become stained by methyl-violet, according to Ehrlich.

6. In the clinical diagnosis of tuberculosis by histological examination, these facts should be well borne in mind.

Our readers see the drift from the above summary. It is eminently satisfactory that the tubercle-bacillus maintains its identity. But then the modern aggregation of would-be mycologists are no Pasteurs and Kochs.

A New Patella Splint.

Dr. L. R. Markley of Juniata, Neb., sends us the following description and cut of an apparatus designed by him:



"I desire to call the attention of the profession to a splint designed principally for the treatment of transverse fracture of the patella, but which I believe will also be found useful in cases of fracture of the limb at or near the knee joint, and in many cases of dislocation. A few years ago, while yet a student, I conceived the idea of making a splint as here illustrated, and as I have had made for me by Messrs. Charles Truax & Co., 81 Randolph St., Chicago. This splint consists of two well padded iron troughs shaped to fit the limb above and below the knee. These troughs are connected with an adjustable hinge having a circle stop which will permit the splint being applied and firmly held either straight or flexed at any desirable angle. It can thus be used straight in treating fractures of the patella, or bent to meet the requirements when used in other cases. The two screws shown underneath the brace can be turned by a removable thumb-key and are attached to sliding heads running in slots cut in the troughs. To these heads are attached the straps C C which places the amount of traction on the patella completely under the control of the operator. Underneath these straps are placed two well fitting pads which hold the patella in its proper position. The bands B B are made use of to prevent the pads from slipping too far over the patella. The bands A A hold the extremities of the splint firmly to the limb.

In applying the splint the bands A A and B B should be first adjusted; then after tightening the straps, C C (using the buckles), traction can be made with the thumb-

screws until the edges of the fractured bone are brought together. If, however, the ligamentum patellæ is too strong to be overcome by this measure and thus prevents a complete reduction of the fracture, I believe it would be safe to perform at least partial tenotomy of the ligament and thus render its reduction by this method possible. Whether or not the pressure of the pads will cause sloughing in some cases I have not been able to determine, for in a country practice cases of this kind are seldom met with.

I have had several surgeons examine the splint and they all believe the principle to be a good one.

I have not had the opportunity to make a practical test of the splint since I had it made, and in presenting it to the profession I hope that some one who may deem it worthy of a trial, and having an opportunity of trying it, if not for a fracture of the patella, some other accident at or in close proximity to the knee, will report the result."

The St. Louis Medical Colleges.

These institutions have issued their announcements for the coming sessions, and a good attendance, as merited by their several points of excellence, is expected.

The Missouri Medical College will open its forty-fifth annual session on the first day of October. A number of changes have occurred in the faculty and staff. Prof. G. M. B. Maughs resigned from the Chair of Obstetrics and Diseases of Women, which he had assumed again at the death of Dr. P. V. Schenck. Dr. Maughs was made an emeritus professor, and Dr. Gratz A. Moses fills the regular chair.

Pharmacy has been established as a separate chair, which is occupied by Dr. O. A. Wall.

Dr. J. P. Kingsley again takes the Chair of Materia Medica and Therapeutics and Diseases of Children, relinquishing the Chair of Physiology to Dr. L. Bremer, who is a new acquisition, and a valuable one. Dr. Bremer will teach Histology and Physiology, and also Pathological Anatomy. In order to meet the requirements of these essentially experimental branches, a biological laboratory is being fitted up and properly equipped.

The St. Louis Medical College opens its forty-fourth annual session on the twenty-first day of September. The only change in the corps of instructors is that Dr. F. A. Glasgow has been chosen Clinical Lecturer on Gynecology. The extensive hospital facilities heretofore enjoyed remain, and are increased by the acquisition of the Alexian Brothers' Hospital. Drs. F. W. Wesseler and F. J. Lutz of that benevolent institution, have been won as Lecturers on Clinical Medicine and Clinical Surgery respectively. The school strictly maintains the three years' graded system and rigidly upholds the standard of preliminary requirements.

The St. Louis College of Physicians and Surgeons enters upon its seventh annual session on October 12th; a preliminary session opened September 7th. A number of changes have occurred. Drs. W. W. Watkins, L. Bremer, C. B. Ellis, and Julius Wise, are no longer connected with the school. Dr. John W. Vaughan has been made Lecturer on Physiology and Demonstrator of Anatomy; Dr. O. E. Treutler is Lecturer on Chemistry, Pharmacy and Toxicology; Dr. H. F. Hendrix, Lecturer on Laryngology and Physicial Diagnosis; Dr. J. W. Pardue, Lecturer on Hygiene and State Medicine; Dr. A. A. Henske, Lecturer on Gynecology; and Dr. Wm. F. Thornton, Assistant Demonstrator of Anatomy and Curator of the Museum.

Mississippi Valley Medical Society.

A successful meeting of this body is in progress at Evansville, Ind., at this writing. The Review has been continued as the official organ. We print to-day the first installment of a series of valuable papers and discussions.

ALBUMINURIA: ITS CAUSES AND VARIETIES. —The Medical News contains the following abstract:

"Senator, in the Berliner Med. Wochenschrift, No. 16, April 20, 1885, enumerates the following conditions liable to determine the presence of albumen in appreciable amount in the urine:

Disturbances of the renal circulation. High pressure, if the urine be concentrated, should produce albumen. This condition is actually found to obtain by muscular action, on account of perspiration and loss of fluid by the lungs, and, though not so accurately, by elevation of temperature.

Passive hyperemia acts in itself similarly to increased arterial tension, but the distended veins in the medulla of the kidneys press together the urinary tubes, leading to obstruction of the passage of urine and edema of the kidneys. The consequence is:

a. That albumen transudes from the interstitial capillaries into the urinary tubes.

b. That urine exerting pressure upon the glomeruli produces a diminution of pressure from the glomeruli, and leads to a relative increase of excretion of albumen. To this cause of albuminuria is allied that caused by blocking of the urinary tract, manifested when the impediment is removed, or when the obstruction is not complete.

c. The condition of the filtering membrane, as in inflammation, fatty degeneration, and amyloid change. Not only does albuminuria result from an increased permeability, but the degenerated membranes and epithelium themselves appear in the urine as albumens, and this may explain the fact that in the urine albumens may have a different relation to each other from what exists in the blood. The substance of the epithelium appears to contain a body intimately allied with globulin.

d. The composition of the blood may cause the appearance of albumen, e. g., from an excess of nutriment, from increased dissolution of albumen, or from excessive secretion of water elsewhere, etc. It is held by Rosenbach, that the composition of the blood is constantly regulated by the action of the kidneys, and that inassimilable albumen is excreted by the kidneys. Albuminuria not caused by inflammation, this author designates as "regulatory." His idea, though important, is not free from objections.

Finally, as Stokvis and Lehman have pointed out, the excretion of albumen can act injuriously on the kidneys.

e. Mention has already been made of the influence of temperature in connection with changes of pressure.

The author further remarks that the forms of albuminuria may be clinically divided into two classes, pathological and physiological, although no exact line of demarcation distinguishes them. Among physiological albuminurias may be mentioned that of the newborn, which is probably due to the suddenly increased pressure in the glomeruli, taken in connection with the probably increased destruction of the blood-corpuscles.

Albuminuria can exist in a healthy man for years without any signs of ill-health, and then cease.

Fürbringer, too, has found this condition in children, in whom chronic nephritis is very rare.

The author, in this connection, alludes to the albuminuria due to mental perturbation, and to that caused by cold baths.

Pathological albuminuria includes the following:

1. That present in non-febrile diseases, in which the composition of the blood is specially concerned, and in which the kidneys do not participate to any extent; in anemia, leukemia, and pseudo-leukemia; in scurvy, in icterus and in certain cases of diabetes. Nothing is found in the urine indicative of renal disease.

2. Albuminuria in non-febrile nervous diseases, in epileptic seizures, delirum tremens, cerebral apoplexy, neurasthenia, migraine, Basedow's disease, etc., and allowing for other existing causes, numerous cases exist where the albuminuria is traceable only to the nervous condition.

3. Febrile albuminuria. In this condition there is a combination of favoring causes,

such as high temperature, febrile changes in the circulation and in the composition of the blood, with consequent disturbance of the nutrition of the kidneys, and, lastly, concentration of urine.

4. Albuminuria of passive hyperemia.

5. That due to blocking of the urine.

6. The albuminuria of pregnancy due to various causes, disturbance of the lesser circulation, passive hyperemia due to abdominal pressure on the vessels, and constriction of the ureters.

7. That due to diffuse inflammation and degeneration of the kidneys (acute nephritis, subacute and chronic and amyloid degeneration).

8. That depending on circumscribed affections of the kidneys, such as infarcts, abscesses and tumors.

In conclusion, the author insists on the necessity of constantly remembering that the treatment of each individual case of albuminuria varies with the exciting cause.

Laparotomy for Ileus.—Dr. Edgar Kurz reports in the "Deutsche Medicinische Wochenschrift" (Am. Jour. Med. Sc.), a case of laparotomy performed on account of intestinal obstruction. The operation resulted in the complete recovery of the patient, and is interesting as being extremely rare in private practice.

The patient, a man aged thirty-three years, twelve months previously had a severe attack of typhoid fever attended with numerous complications. He recovered, however, and perfectly regained his health.

In August, 1884, for the first time, he noticed a small hernia into the right inguinal canal which did not descend into the scrotum, and could easily be replaced within the abdominal canal. October 23, 1884, Dr. Kurz was summoned to the patient, and found him suffering severe abdominal pain, attended with vomiting. Examination made at once, and the following day made it clear that the hernia was not the cause of the pain and vomiting. Palpation of the abdomen was not painful; the urine was clear, and after an enema, which was followed by a movement of the bowels, the pain grew less severe. However, the following night the pain returned, as also did the vomiting. No results from enemata; no evidences of hernia; and the patient's countenance was the characteristic facies abdominalis. Diagnosis was accordingly made of ileus. As to its cause and location nothing could positively be stated. The condition of the patient constantly became more serious, as evinced by stercoraceous vomiting, hiccough, and increased pain in the abdomen. The temperature on October 29th and 30th, was 97.3° F.; pulse 80. October 31st, the temperature became still lower, being only 96.4° F. November 1st, the condition of the patient being in no wise improved, operation was decided upon. After evacuating the bladder the abdomen was opened in the linea alba under a one and a half per cent carbolic spray. While the incision was being made a severe attack of stercoraceous vomiting came on. Examination revealed no signs of peritonitis. Search was now made for cause of the obstruction, and a finger introduced into the ileo-cecal region discovered the presence of a ring in which the colon had become ensnared. It was so tightly held that moderate traction was unable to release it, accordingly a probe-pointed bistoury was introduced and the ring twice incised. The bowel was now readily withdrawn, and was found to be injected and intensely red. The neck of the hernial sac was found to be a hand's breadth from the internal ring, which at once explained the negative result of all previous examinations. After the replacement of the intestine the abdominal wound was closed by three silk peritoneal and six superficial sutures, which were rendered antiseptic by previous boiling in a five per cent carbolic solution. Iodoform was then applied and the wound covered with carbolized gauze, held in position by strips of adhesive plaster. The operation lasted scarcely half an hour.

The case progressed rapidly to recovery. Movement of the bowels took place for the first November 6th, and the 12th of November he

was able to take short walks and drives. At the present time he has resumed his ordinary employment, and is perfectly well. Defecation is normal, and all traces of the hernia, previously existing, have disappeared.

THE REGULATION OF PROSTITUTION.—According to the "Archives de Tocologie, Aug. 1, 1885" (Medical News), Dr. Martineau, at a recent meeting of the Société Obstétricale et Gynécologique de Paris, presented the following conclusions relative to the control of prostitution. He considers as necessary—

1. To keep surveillance over, to restrain, and repress by laws and regulations, old or new, the practice of clandestine prostitution, which is more active in the propagation of syphilis than open, regulated, and legalized prostitution.

2. To compel from legalized prostitutes more frequent medical examination—every three or four days.

3. To suppress medical visits at the residence of prostitutes, except in certain determined cases.

4. To increase the number of dispensaries and of physicians in this service.

5. To suppress the infirmary of the prison Saint-Lazare for legalized and clandestine prostitutes affected with syphilitic disease.

6. To create a special hospital for legalized prostitutes, the hospital of Lourcine being reserved for clandestine prostitutes.

7. To create in the hospital a special service for suspected patients.

8. That the hospital be apart from police supervision, and be managed by the municipal authorities.

9. That the physicians of the dispensary be appointed by competitive examination.

10. That medicine and baths be given to syphilitics in outside consultation with the hospital.

11. An apartment reserved in the hospital specially for women under criminal charge when suffering from venereal disease.

12. To make visits to the hospital obligatory to every prostitute as soon as she finds herself diseased. These visits will not result in the registry of the woman upon the lists of authorized prostitutes.

13. To retain in the infirmaries of the prisons until completely cured all men affected with venereal disease. This power being devolved upon judicial authority only, based upon a medical certificate certifying the nature of the disease.

14. The suppression of pandering, etc., by rigid laws.

TREATMENT OF WHOOPING-COUGH.—H. Roger recommends the following mixture in the treatment of whooping-cough.

℞.—Tr. belladonnæ - - f℥v.
Tr. valerianæ,
Tr. digitalis - aa f ʒiss.—M.

Five drops of the mixture for children under two years. Each day the dose is augmented five drops until thirty drops are given in twenty-four hours. In patients from two to five years old ten drops should at first be prescribed, and every two days the dose increased until it reaches sixty drops. In case the tincture of valerian is badly tolerated it should be replaced by some other tincture—musk, for example. When nervous and spasmodic symptoms are prominent, the author has recourse to chloroform; and in children from two to five years of age administers from six to thirty drops of the drug in any appropriate menstrum.—L' Union Médicale (Medical News).

INTRA-CRANIAL SYPHILIS.—To the Glasgow Pathological Society (Glasgow Med. Jour., Medical and Surgical Reporter) Professor M'Call Anderson showed a case of intra-cranial syphilis, and gave the following notes of the clinical history:

The patient, a clerk by occupation, and 37 years of age, was admitted into Ward II on March 10, 1885. His family history is good, but he was always considered a delicate child, and after leaving school, while employed in a coal-pit, he contracted inflammation of the right lung. Nine years ago he became a

clerk, but his employment did not involve very close confinement.

About six months before admission, on rising from the sofa, he felt a curious sensation in his head; his face was drawn to the left side, and his right arm was twisted up behind him. He was able, however, to walk to the door and call for help, but immediately thereafter he fell to the ground unconscious. His friends said the attack lasted about ten minutes, during which time he "frothed at the mouth;" the face was drawn at the left side, and the right side of the body was convulsed. On regaining consciousness he felt exhausted and inclined to sleep. Five weeks after this he had a second fit, which was not severe. On this occasion he fell suddenly to the ground, was convulsed on the right side, but retained consciousness. After that he had attacks daily until three months ago, when under the influence of treatment, they ceased, and have not recurred. Before each attack he had a feeling of giddiness for some time, and immediately preceding it a curious sensation in the palm of the right hand. Nearly from the first there has been constant trembling of the right hand, and for three or four months the right arm and leg have been gradually becoming weak. Almost from the first, too, he has been troubled with attacks of pain limited to the right side of the head, which soon became very intense, and which continued for hours, but for the last three weeks they have not been so severe.

For about three months there has been pain in the right hip-joint which, however, is not limited to the joint, but extends a little way up the side. For some weeks, too, he has been troubled at times with giddiness, and with dimness of vision, which appeared to him to be limited to the right eye. In consequence of this on more than one occasion he came into collision with vehicles passing him in the street on his right side.

There is considerable improvement in his condition now (on admission), for not only has he had no convulsions of late, but the hemicrania is much less severe; the paresis of the arm and leg is still less distinct, although he still occasionally strikes the floor with the sole in advancing the foot, and the dynamometer registers only 55 on the right side, as compared with 85 on the left. Indeed, the most marked feature in his case at present is hemiopia, which I now demonstrate to you. The following is Dr. Reid's report: "With the right eye he cannot see an object which is placed the least to the outside of a line drawn directly through the middle line of the eye. With the left eye the defect is discovered on bringing an object towards the inner side, but the defect is not so great as with the right. * * * The ophthalmoscope gives negative results.

With regard to the seat of the lesion it was evident that it was at the base of the brain on the left side, because of (1) the paresis, (2) the convulsions, and (3) the tremors of the hand, all on the right side. The hemiopia was due to the implication of the left optic nerve behind the commissure. The nature of the tumor was evidently syphilitic, because of the scar of a sore on the penis, followed in some months by sore throat, and by numerous sores on the dorsum of the tongue, and because of alopecia and nocturnal pain in the hip-joint.

Under treatment by the mercurious oleate of Shoemaker, all the above symptoms had almost entirely disappeared, and the hemiopia was nearly completely gone.

Dr. Thomas Reid thought that it was a clear case of affection of the optic nerve behind the chiasma. It seemed to him that the diagnosis and treatment had been much more efficacious than was usually experienced in such cases.

Dr. Tennent said that, with regard to the duration from the period of infection to the development of nervous symptoms, he had recently a case, which Dr. Thomas Reid also saw with him, in which the remarkable feature was that a period of twenty years had elapsed since the primary infection. At the time of the infection he had been treated for years with a good result, and had experienced no evil consequences till the onset of the nervous symptoms. In this case the re-

sult of treatment had been most successful. He had seen nervous symptoms result from syphilis after 18 months.

Dr. W. T. Fleming had seen the case and treated him for sore tongue with Dr. Mungall. He regarded it as clearly a specific affection, and he rapidly got well under the original treatment.

SOCIETY PROCEEDINGS.

MISSISSIPPI VALLEY MEDICAL SOCIETY.

Eleventh Annual Session, held at Evansville, Ind., September 8, 9, and 10, 1885.

ESPECIALLY REPORTED FOR THE REVIEW, THE OFFICIAL ORGAN.

The society was called to order by the President, Dr. F. W. Beard, of Vincennes, Ind., who made a very few brief remarks.

Dr. A. M. Owen, of Evansville, Chairman of the Committee of Arrangements, spoke for a few moments. He said that 5,000 circular letters had been sent out and notices put in most of the journals, and the session had altogether been very well advertised though it was impossible to get notices to all to whom it was desirable to send. He remarked that in glancing over the programme he saw some objectionable subjects; such, for instance, as "International Medical Congress—New and Old Committee—by a member of the American Medical Association." He hoped that paper would not be submitted (applause). We have nothing to do with what is done in other societies. He spoke of the arrangements he had made with the railroads and hotels.

Report accepted.

Chair appointed as Committee on Credentials: Drs. Chas. Knapp, of Evansville, Ind., Ben L. Helm, of Henderson, Ky., and Edward Borck, of St. Louis.

The reading of the minutes was on motion dispensed with.

The Chair, on the motion of Dr. G.W. Burton, appointed as Committee on Publication: Drs. A. M. Owen, Evansville, Ind.; W. G. Burton, Mitchell, Ind.; H. J. B. Wright, Olney, Ills.

Dr. Wright stated from the former Committee on Publication that all papers which had been handed in to them had been published in the Weekly Medical Review. Two or three papers had been published in Chicago and elsewhere. He thought it an object to get the papers published as soon as possible.

The Secretary's Report by Dr. G. W. Burton, of Mitchell, Ind., was made. He reported the usual amount of correspondence and answering of inquiries. Many did not understand the plan of the organization of the society, why it was that it has no by-laws. He thought it would be advisable to have a sketch of the society and a list of its members made out and published in one of the journals.

Report accepted.

After the reception of members by invitation a recess was taken for registration.

Dr. J. E. Sutcliff, of Indianapolis, Ind., reported

A Case of Perineal Section Without A Guide for Stricture of the Urethra.

On February 6, 1885, Dr. F. S. Newcomer and myself were called to see Mr. John D., aged 56 years, native of Ireland, and a tailor by occupation.

We found the patient suffering from retention of urine. The bladder was largely distended, reaching well up toward the umbilicus. There was increased frequency of the pulse and the temperature was 101°F. The perineum was swollen, tender, and of a pinkish hue; and the patient anxious and restless. During his efforts at straining a few drops of urine would occasionally dribble away. He gave no history of urethral inflammation, but stated that for a long time it had taken him nearly an hour to empty his bladder, the urine passing away by drops rather than in a stream.

Some large external hemorrhoids verified his statements as to the efforts he had made to expel the urine. On examination we found a narrow stricture at the meatus, and the adjacent tissues indurated and contracted. We also found an impermeable stricture at the junction of the bulb with the membranous portion of the urethra. On making an examination per rectum the prostate gland was found to be considerably enlarged.

A patient and thorough effort was made to pass a small instrument through the deep stricture, but all to no purpose; not even the finest catgut bougie or whalebone guide could be induced to enter the bladder.

In compliance with the urgency of the symptoms the bladder was tapped above the pubes with the aspirator, and the urine with-

drawn. Anodynes were given to allay pain and spasm, and afterward an aperient was administered. On the mornings of the second and third days the effort at catheterism was renewed without success, and each day the urine was removed with the aspirator, little if any being passed by the urethra. On the fourth day the bladder was again distended and the general symptoms more alarming. The extravasated fluid was distending the perineum and infiltrating the areolar tissue of the scrotum. The pulse was 116—temperature 102° and the patient delirious. It was decided upon to resort to perineal section. An anesthetic was given by Dr. W. Wands, and a final effort was made to pass a guide through the stricture, hoping to simplify what might otherwise be a difficult operation, to say nothing of the element of uncertainty which is always connected with it. Failing in this the stricture at the meatus was freely incised, and Gouley's catheter staff (grooved on its posterior surface) was introduced down to the front face of the stricture.

Dr. Newcomer took charge of the staff and an incision was made in the median line of the perineum through the integument, superficial and deep layers of the superficial fascia. A pint and a half of pus and urine flowed through the wound. The urethra was then opened on the point of the staff and the instrument slightly withdrawn. A careful search was then made for the opening through the stricture with a delicate grooved probe,at the exact point against which the staff had rested. After a few slight incisions were made in the median line the probe found its way through the stricture. The callous tissue was divided, and the staff entered the bladder, guided by a grooved director introduced through the cut. To make sure that no indurated tissue remained undivided, a good sized sound was introduced through the meatus to the bladder. No catheter was left in the bladder, and the wound and bacteria were allowed to take care of themselves. The urine flowed freely through the cut and urethra, and the after treatment consisted of the introduction of the sound every few days in order to maintain the normal caliber of the canal.

The patient recovered without an unfavorable symptom, but a slight fistula still remains at the point of incision. This will close eventually if the urethra is kept open. The urine passes freely through the natural tract. The use of the sound is required for an indefinite period after recovery has taken place. Its use is the penalty for having been overtaken by urethral contraction.

As to the difficulty of making the operation, it occurs to me after the limited experience of two cases that the danger of failure is due largely to cutting too freely after the front face of the stricture is exposed. That is the critical moment when we should rely largely on the probe, and keep in mind the anatomical relation of the parts.

Incisions may cause the operator to lose his bearings, and, when once on the wrong road, he is fortunate if he finds his way. The subpubic ligament can be detected with the finger, and three-quarters of an inch below it in the median line is the point where the urethra pierces the triangular ligament. Extravasated urine from stricture may pass in three directions. Most frequently, as in the present case, it makes its way in front of the triangular ligament, distending the perineum and scrotum. It may escape between its two layers, or it may pass behind it, infiltrating the tissues about the bladder, where it produces the most disastrous results.

When extravasation of urine takes place as a result of stricture, what operative measures are indicated? Should we be content to relieve the extravasation alone, or should we in addition deal with the stricture at the same time? Some very eminent writers upon this subject claim that to relieve the retention is all that is required, and that the stricture may be treated afterwards, and, if necessary, operated upon. In connection with this subject, Sir Henry Thompson makes the following statement:

"Immediate operative measures for the cure of stricture are not called for, as in the present state of the patient they are neither practicable nor advisable; and further, it is by no means improbable that when the retention is relieved a catheter may be passed into the bladder by the urethra." My belief is that in the majority of instances the stricture should be thoroughly divided at the time the retention is relieved. The operation should be made early, before there has been extensive burrowing of fluid and destruction of tissue. It is true that when the urine passes through the perineum and the urethra is allowed to rest that the congestion about the stricture subsides, the plastic exudation is absorbed, and the stricture relieved to a certain extent. Rest, however, cannot proceed any farther in completing the cure. It cannot remove the organized fibrous tissue, any more than it can absorb the cicatrix of a burn. Gradual dilatation, after retention is relieved, unnecessarily prolongs the treatment.

Most patients will consent to but one operation, and it would be cruel not to take ad-

vantage of the opportunity and divide the stricture, thereby cutting short a vast amount of anxiety and suffering. Its division does not add materially to the shock of the operation, and it at once places the patient on the high road to a speedy and perfect recovery.

Dr. Wm. A. Bryant, of Quincy, Ill., opened the discussion. He spoke of Reginald Harrison's recent lecture before the British Medical Association at Cardiff, where he recommends external urethrotomy so that the urine would not flow over the open wound. He gave his experience in the two hospitals at Quincy. He had not found impermeable stricture and believes in making the operation in the manner recommended by Reginald Harrison. He did not advise the cutting of the prostate gland; you may go beyond your legal rights. He has recently used the urethral bougie, twenty-three American, forty-six French. Has had no urethral fever going beyond 100°.

Dr. Louis Bauer, of St. Louis, said: The question involved is, are there strictures permeable or non-permeable. I think they are permeable. When you have impermeable stricture you cannot introduce an instrument. If you can't evacuate the bladder by going in through the penis you must perform external urethrotomy. He does not use an anesthetic. Puts patients in the lithotomy position, orders them to press down as if they were going to pass water, then with one stroke of the knife opens the urethra and the urine gushes forth. He does not think with Jeterson that the bladder distends more upwards than downwards. Does not think that it is more downwards than upwards but that it is equally distensible in all directions. Believes that external urethrotomy can be performed readily and easily and should be done more frequently than is the case. Thought there was great liability to the return of the stricture if fibrous and dilated by sounds. He recommended highly a French instrument he had which would cut up or down. If internal urethrotomy is performed, the patient must be disciplined to use the catheter proficiently, for it will not do for the urine to pass over the wound.

Dr. A. M. Owen, of Evansville, arose to settle the point at issue as to whether a permeable stricture exists or not. He knows it does. He had a patient from whom not a drop of urine passed by the urethra for ten years. He met with an injury while a boy which completely closed up this organ. He found ten or fifteen urinary fistulæ through the scrotum. He explained the minutia of his treatment of the case which was successful.

Dr. Archibald Dixon, of Henderson, Ky., thought there was impermeable stricture and related a case of his, a stricture resulting from gonorrhea, where the urethra was completely grown together.

Dr. Joseph Eastman, of Indianapolis, said: The paper urges the importance of a thorough knowledge of the perineum. He thought this was right and did not agree with Dr. Bauer, who thought the essayist was afraid of the anatomy of the perineum and who said that with a distended urethra it mattered little about the anatomy. When we cut into the vagina of a female and relieve a cystitis suffering worse than death, why can we not do the same in the male? He urged the greater study of this subject.

Dr. A. C. Bernays, of St. Louis, wished to settle the question that there is an impermeable stricture; Dr. Bauer, to the contrary notwithstanding. We have had two cases, one cicatricial, one gonorrheal. He considered the three operations and favored Coxe's or the English plan.

Dr. Sutcliff closed the discussion. He thought tapping in front of the prostate gland, Guther's operation, excellent. Adjourned for dinner.

BULLETIN OF THE NATIONAL BOARD OF HEALTH.

August 25, 1885.

The following abstract from Reports received since the date of our last Bulletin is respectfully transmitted for your information:

Three Rivers, Canada, August 8.—Free from epidemic diseases. Consul reports that there is no small-pox below Montreal.

Cardenas, Cuba, August 8.—Place free from cholera and yellow fever.

Cienfuegoes, July 15.—No cholera or yellow fever.

Nassau, N. P., August 1.—In fair sanitary condition. No epidemic diseases.

St. Thomas, W. I., July 25.—Intestinal catarrh and acute diarrhea prevalent, but in mild form. Very few fatal cases.

Curacoa, W. I., August 15.—In good sanitary condition.

Acapulco, Mex., July 26.—Free from epidemic diseases.

Vera Cruz, Month of July.—Eighty-four deaths from yellow fever. Consul states that there is no doubt of the epidemic character of the disease.

Laguayra, Venez., August 8.—In good sanitary condition.

London, Eng., August 8.—Deaths from diarrhea and dysentery 309; from cholera or choleraic diarrhea 11, and from small-pox 14, including 9 of London residents who died from the disease outside the registration district. On August 8 there were 518 cases of small-pox in the London hospitals, being 96 less than in the previous week. Admissions during the week 43, as against 69 during the previous week.

Bristol, Eng., August 8.—One death from cholera, that of a sailor from Marseilles. Disease has not appeared among residents.

Paris, August 8.—Two deaths from small-pox; 26 treated in hospital.

Marseilles, August 25.—By cable: Deaths from cholera average 55 daily.

Toulon, August 25.—Twenty-five deaths from cholera yesterday.

Bordeaux, Month of July.—Four deaths from small-pox.

Barcelona, Spain, July 31.—One death from small-pox; 36 deaths from contagious diseases not classified. Gastric and intestinal catarrh prevalent.

Cadiz, Spain, August 8.—Free from epidemic disease.

Gibraltar, Spain, August 2.—Free from epidemic disease.

Valencia, Italy, July 25.—Cholera 523 cases, 212 deaths.

Valencia, Spain, August 2.—Cholera 262 cases, 157 deaths.

Genoa, Italy, August 2.—One death from small-pox.

Venice, Italy, July 25 and August 1.—Eleven deaths from small-pox.

Trieste, Austria, August 1.—Six cases and 2 deaths from small-pox.

Prague, Austria, August 6.—Two deaths from small-pox.

Antwerp, Belgium, August 1.—Fifteen cases and 2 deaths from small-pox.

St. Petersburg, July 25.—Six deaths from small-pox.

Warsaw, August 1.—Four deaths from small-pox.

Calcutta, India, July 4.—Sixteen deaths from cholera.

Small-Pox in Montreal, Canada.

The following report concerning the progress of the epidemic in Montreal has been received:

No. of deaths from the disease in April, - -	6
" " " " " " " May, - -	13
" " " " " " " June, - -	46
" " " first two weeks in August, - -	45
Total	120

Number of houses bearing placards on the 19th inst. indicating the presence of small-pox, 106.

The Medical News, Madrid August 4, states that the Commission recently sent into the infected districts of Spain report that in all the villages they were able to visit they found the same clinical characteristics of the disease—that in the towns supplied with water from spring or wells cholera either did not prevail at all or to a very limited extent, while in the towns supplied with water from streams the disease was very destructive, the water being contaminated by the washing of the clothes of cholera patients.

W. P. Dunwoody, Sec'y.

SELECTION.

ADDRESS IN SURGERY.

Delivered at the Annual Meeting of the British Medical Association in Cardiff.

BY J. MARSHALL, F.R.S., F.R.C.S.,

Emeritus Professor of Surgery, University College, London; Consulting Surgeon to University College Hospital.

[CONCLUDED.]

Let us next proceed to consider the ultimate and practical question of results.

4. Comparative View of the Results of Treatment at the two Selected Periods.—Under imperfect sanitary conditions, without special isolation wards, with less attention to the details of ward-management and to their cheering influences, with fewer scientific means of diagnosis, with no chloroform or ether, and no hypodermic method of quelling pain or other nervous disturbance, with simpler instruments, and less recondite dressings and appliances, were the results obtained in 1844-45 inferior to those realized in the same hospital, under other conditions in 1883? The reply is "Yes," in certain particulars but not in all.

In the first place, I find that, as well as I can determine, the average period of stay of a surgical patient in the hospital in 1844-45, was twenty-eight and one-half days in the female wards, and twenty-nine and one-half days in the male wards; whereas, in 1883, it was about twenty-six days for the female, and twenty-one days for the male patients, this latter smaller ratio being due to the disproportionate number of simple fractures occurring in the male sex. Too much stress, how-

ever, must not be placed on these figures, since the total number of cases is not sufficient to neutralize the effect of important differences in the severity of the cases, whether in kind or in degree.

Partly on a similar ground, but also on account of the different value assigned by different persons to the terms "cured," "relieved," and "discharged as incurable," I refrain from recording, in regard to such general results, figures which would be unreliable, or actually misleading. For example, in the older records, cases of caries of bone, stricture of the urethra, epithelioma, and scirrhus, are entered as having been "cured," and in the latter set, as being only "relieved," by operative treatment.

Even the ratio of mortality is deceptive, although it shows an advantage on the side of the latter period, the percentage of deaths in 1844-5 being 7.5 for the males, and 6.5 for the females; whilst in 1883, these were about 5.75 and 5.74 respectively. But here, the fatal cases of the two periods are not commensurable, and a single acidental death, as for example from a burn, completely vitiates the result. Hence, a comparison of the treatment and its consequences, in distinct classes of injuries and diseases, will be found much more just and more instructive.

A. The chief point to be noted in regard to differences in the management of simple fractures consists in this: that those of the leg and thigh were formerly retained longer in McIntyre's or Desault's splints, before they were put up in starched apparatus, of which Liston was a great advocate. Patients so injured were, therefore, detained longer in the hospital then than now. The introduction of the plaster-of-Paris treatment has still further abridged the time during which a bed is occupied with a case of broken leg, patella or femur. Wiring of bones was not attempted. Compound fractures proved to be very prolonged cases, and those of the lower limb were often fatal, with or without amputation.

B. Injuries not involving a breach of the surface of the body, simple inflammations consecutive to these, or so-called idiopathic local inflammations which come under the care of the surgeon, such as sprains, simple dislocations, synovitis, orchitis, and other cases, were not less satisfactorily treated in 1844-5 than in 1883, and the progress of the patients towards recovery was quite as rapid. Venesection is not mentioned in Liston's casebooks, but cutting and leeching were in the ascendant. A patient with disease of the hip-joint, requiring at the time only the application of Liston's famous leather splint, informed her dresser that she had previously had 141 leeches applied around her hip in the course of three months. A man with acute synovitis of the knee was ordered eighteen leeches over the joint on the day of his admission, eighteen more on the day after, eight on the tenth day, and ten on the twentieth day, and a week afterwards was discharged convalescent. For a condition described as "mania" from head injury, a cupping of twelve ounces was ordered to the back of the neck, followed by two sets of leeches, twenty each time, to the temples, and, five days later, by a blister and the administration of calomel, and so was cured. Inflammatory urethral stricture, prostatitis, and supposed cystitis, were relieved by free cupping on the perineum, and so in many other diseases. Whether these sanguinary proceedings were necessary or even beneficial, and whether the local abstraction of blood is now too much neglected in cases of acute inflammation, especially of important organs, are problems which I cannot here discuss.

C. In comparing the older and the more recent management of inflammations which end in suppuration, ulceration, or gangrene, or in combinations of these morbid processes, we meet with facts more or less unfavorable to the older practice, and unmistakably cumulative in support of the advantages of modern, that is, aseptic surgery.

Acute abscesses were treated by very free incisions with ultimate success; but suppuration continued for many days, and the abscess cavity was filled up slowly. Nor were there wanting instances of more serious evils. Erysipelas and further abscesses often supervened. A patient with successive abscesses in the abdominal walls, due presumably to caries of the ilium, is recorded to have left the hospital on the thirty-second day, and to have died a few days afterwards. An acute abscess in the head of the tibia, opened with the trephine, was 77 days in healing. Abscesses and sinuses around, but not communicating with the hip-joint, are mentioned as not having become closed when the patient was discharged from the wards, after the expiration of 83 days. Lastly, an acute abscess in the knee-joint proved fatal, from distinct pyemia on the forty-seventh day, purulent deposits being found in the lungs after death. It is hardly necessary to state that poultices, and not antiseptic dressings, were employed; and, although counter-openings were freely practiced, no drainage-tube was in use; and the abortive treatment of moderate-sized abscesses by aspiration and the in-

jection of morphia, carbolic acid or iodoform, was unknown.

Ulcers of the integuments which usually are not prone to allow infective absorption were very well managed in Liston's wards. Rest, elevation and his favorite water-dressing, consisting of wetted lint, covered with oiled silk, cured most cases. All greasy applications were rigorously forbidden, for against these Liston waged an angry war. A spreading ulcer with fetid discharge was treated with a lotion of chlorinated soda, or a weak solution of iodine, both strongly antiseptic and germicidal agents. Red wash, which probably acts in both these ways, as well as a local stimulant, nitrate of silver and sulphate of copper were used as now; strong nitric acid was applied against phagedena; solutions of chlorine and iodine against slight sloughings and actual gangrene.

Periostitis, osteitis, caries of bone and necrosis, were treated successfully, as now, by subcutaneous incisions, trephining, the extraction of sequestra and scooping. In one report the dresser mentions an instrument under the name of a "proper scoop," which, I assume, was really a "sharp scoop."

Venereal diseases were treated without mercury, or with as small doses as possible, in accordance with views which had then been ably propounded; and, as no distinction was made between the hard and the soft sores, so far as their possible consequences were concerned, whilst the majority of those taken into hospital were evidently soft chancres, followed by bubo, the non-specific or almost non-specific treatment was very successful. Iodide of potassium was becoming a favorite remedy; but it is curious to observe that a common formula in the notes was one grain of blue pill and one grain of iodide of potassium, combined in one mass, to be taken three times a day. When the iodine was administered alone the usual dose was three grains three times daily; very seldom did it reach to four or five grains. In deep syphilitic ulcerations and in sloughing gummata a weak solution of iodine was commonly ordered as a lotion. Numerous cases of syphilitic caries and necrosis were admitted, and one of extensive disease of the parietal bone ended fatally with abscess in the corresponding part of the brain.

D. Wounds.—Passing by burns, scalds and injuries from caustics, I proceeded to consider the cases of wounds of greater or less severity, 28 in number, which were received into Liston's wards in the year in question. Four of these occurred in women. One only healed within a week, and, as stated in the notes, "by the first intention"—namely, a wound in the palm, involving the superficialis volæ and another small artery. A cut down to the patella granulated and suppurated, and healed favorably in 17 days; an abrasion over the shoulder led to erysipelas and axillary abscess, the patient leaving the hospital on the eighteenth day; the fourth and last case, a punctured wound in the foot, became complicated with abscesses in the foot, leg and thigh, and was detained in the ward for 55 days. Of the 24 examples of wounds happening to men, four only healed, presumably by the first intention, in from five to nine days; these were wounds affecting, respectively, the ear, eyelid, scalp, and scrotum, the last one laying bare the tunica vaginalis. In six other cases very free suppuration, with accompanying fever, ensued—namely, in a wound of the scalp, a contused wound of the eyelid and eyebrow, a glass-cut of the forearm, a long splint in the perineum, a lacerated wound of the foot, and, lastly, a scalp-injury requiring counter-openings; in these cases healing was deferred to from 15 to 28 days. In the remaining patients still graver complications ensued; they may be briefly summarized thus: Punctured wound of thumb, erysipelas; the patient, being in good circumstances, was sent out on the eighth day; bite on the back of knuckle, erysipelas, abscess; discharged on the twenty-first day; slight wound in butcher's hand, cellulitis, abscess in forearm and arm, 22 days; contused wound of leg, rigors, abscesses, 30 days; wound of ulnar and another smaller artery above the wrist, ligature, cellulitis, sloughing of fascia up the forearm, 32 days; lacerated wound of palm, abscess, sloughing, much fever, 34 days; punctured wound of thumb, suppuration, frequent rigors, 39 days; contused wound of ear and side of head, so-called "erythema," suppuration, 42 days; punctured wound of thigh, profuse hemorrhage, suppuration, burrowing of pus, 45 days; attempted suicide, division of brachial artery at bend of elbow, cellulitis, sloughing of areolar tissue, severe fever, 54 days; gunshot wound of forearm without fracture, deep seated suppuration, great fever, 58 days; lastly, two fatal cases, namely, a lacerated wound of the leg, erysipelas, rapidly spreading diffuse cellulitis, gangrene, and death on the eighth day; and a cut-throat dividing the trachea, followed by bronchitis and infective pulmonary abscesses, proving fatal after 61 days.

These cases, the only ones admitted, are surely sufficiently striking; but we have yet to consider the results of the cutting opera-

tions performed in the hospital during the twelve months of 1844–5.

Operations.—Five cases of lithotomy, four of herniotomy, and one of perineal section for laceration of the urethra, all successful, afford evidence of Liston's skill as an operator; and, as regards the duration of the cases, three of the lithotomy patients were cured within the month, one on the thirty-third day, and the remaining one, an elderly patient with large stone, on the fifty-third day. One of the hernia cases was discharged cured on the ninth day, one on the twentieth, another on the thirtieth, but one not until the forty-seventh day. The perineal section was closed on the twenty-eighth day. A case of phimosis in a boy required twenty-four days to cicatrize; and another, in an adult, was followed by erysipelas, severe rigors, and bubo, and was healed only after thirty-nine days. Fistulæ in ano behaved as now; but one patient thus afflicted died on the seventh day after the operation from pulmonary complications. Two cases of extravasation of urine were unavoidably fatal, in one of which minute abscesses were found in both kidneys.

For the removal of excision of new growths twenty-one operations were performed in the year 1844–5—eight upon men, and thirteen on women. They may be thus briefly detailed. Male cases: Three, namely, a small epithelioma of the tongue, epithelioma of the lower lip and a small thyroid cyst healed by first intention by the end of a week; two, namely, a larger thyroid cyst and a broad epithelioma of the lower lip, healed with granulation in nineteen and twenty days; three, namely, a parotid tumor, a cystic sarcoma of the testis, and a large lymph-cyst of the neck, all attacked by erysipelas, were cured in twenty-nine,thirty-four, and fifty days respectively. Female cases: Five fatty tumors, the wound, in four, healed by granulation on the twelfth, eighteenth, twenty-fourth, and fifty-seventh days; in the fifth a succession of rigors on the first, third, and fourth days with offensive discharges, the patient was sent out of the hospital on the fourteenth day, and died seven weeks later; five mammary tumors, one a cystic tumor, patient left the hospital doing well on the fourth day; the others, namely, a painful tubercle, two sarcomas with cysts, and a scirrhus healed by granulation and suppuration twenty-one to twenty-eight days; a large parotid tumor followed by abscess and profuse suppuration, thirty-two days; and, lastly, a large thyroid body, seton inserted for ten days, suppuration, intense fever, fifty-seven days. To these cases I must now add that of a very large ovarian tumor of three years duration, tapped once before; operated on, in the words of the case-book, "in Mr. Liston's usual manner," that is, "by a previous incision into the abdomen," and "the introduction into the cyst of a large trocar and canula;" "thirteen quarts of a dark-colored glutinous fluid" evacuated, some more afterwards squeezed out, wound closed; next day pain and vomiting; on third day decided peritonitis; treatment by leeches, fomentations, opium, calomel, hydrocyanic acid, and creasote; incessant vomiting, exhaustion, and death on the twenty-second day. Post-mortem: Peritoneal cavity contained "three pints of purulent-looking fluid with portions of badly formed lymph floating in it; "cysts partly refilled" with "soft adhesions to adjacent parts." In Liston's Elements of Surgery (edition 1840) ovariotomy is denounced from cotemporary experience, as an "unjustifiable piece of butchery!" How all this has been changed by cautious, and, if I may coin a word, precautious surgery!

In two subcutaneous operations, one for a contracted toe, and another for displacing a loose body from the knee-joint into the areolar tissue outside the capsule, the wounds healed at once without suppuration; but in a third for dividing the proper extensor tendon and the long flexor tendon of the great toe, abscesses and ulceration detained the patient 69 days in the ward. Of plaster operations Liston's great pride, a diverted hare-lip united before the end of a week, and an example of webbed fingers healed in a fortnight; but four operations on the face for pendulous upper eyelids, cancrum oris, partial destruction of nose and upper lip, and complete loss of the nose required for the healing process 33, 42, 43, and 66 days respectively; an operation on the scrotum, designed to cover a testis exposed by gangrene, necessitated treatment for 50 days. Ten amputations and one excision of a joint are also recorded. First, four female cases: Compound dislocation of finger, erysipelas, abscess in axilla, 29 days; excision of elbow-joints, ends of humerus and ulna removed, abscess and extensive burrowing of pus up and down the limb, eventual good result, 93 days; large "bleeding sarcoma," or "fungus hematodes," springing from the integuments of the forearm, three or four years' duration, lately rapid growth, axillary glands sound; amputation above elbow, rigors on seventh day, discharges very offensive, abscess in axilla with similarly offensive pus, sweatings, emaciation, jaundice, made out-patient on six-

ty-ninth day, death one month afterwards. Male cases, seven: Compound fracture of finger healed in 16 days; badly crushed finger, so-called "erythema," abscess in palm, patient discharged on twentieth day; comminuted fracture of finger, cellulitis, deep subfacial suppuration along the forearm, 59 days; disease of tarso-metatarsal joint of great toe, removal with internal cuneiform bone, prolonged suppuration in foot, 92 days. There remain three major amputations, all fatal. First case: A buffer-accident, compound fracture of tibia and fracture of head of fibula into the knee-joint on the right limb, fracture of tibia with lacerated wound of leg on left limb, primary amputation of right limb above the knee; progress favorable for three days, then some hemorrhage, left limb became much discolored, rapid exhaustion followed by death on the eighth day; post-mortem, collection of pus around cut end of femur, and extending as high as great trochanter, yellow line of demarcation on left leg, internal organs not examined. Second case: Sarcoma of leg, originating in a cicatrix from burn; amputation above knee, profuse suppuration, separation of flaps, hemorrhage, general oozing, death on the sixth day. Third case: Sarcoma springing from front of tibia, amputation through knee-joint, patella and cartilage on end of femur left, good progress for five days; on the sixth day a slight rigor; on the ninth day severe rigors; on the eleventh day another rigor, with profuse sweatings, discharges fetid, flakes of loose cartilage coming away; on the thirteenth day another rigor subsequently several others less severe, and death on the seventeenth day. No post-mortem examination, but the case was typically pyemic.

In the case of aneurism of the femoral artery, in which the temperature of the two limbs was registered by aid of a thermometer, as the tumor reached above Poupart's ligament, it was necessary to tie the external iliac artery. On the third day, swelling, and so-called "erythema," appeared around the wound; the patient had dyspnea, a rapid pulse, restlessness and delirium; the temperature between the toes of the affected limb, which became dusky, was gradually lowered to 84°, 72°, and 64°, as compared with 93°, 97°, and 78°, between the toes of the sound limb, the temperature of which, be it observed, also fell; the patient succumbed, apparently septicised, on the sixth day.

The picture thus finished of the results of the surgical practice in Liston's ward in 1844-5 is full of instruction. The separate mention of individual cases, all of which I have read from beginning to end, serves to enforce the lessons they teach. In the light of present knowledge, the frequency of grave inflammatory complications must be attributed to removable or corrigible conditions, which would have been prevented or minimized by more effectual sanitary arrangements, by the isolation of infective disease, and by strict antiseptic precautions.

It will have been noticed that, in cases of injury or disease not involving a breach of the surface of the body, and in cases in which, as in operations in the perineum or ischio-rectal fossa, antiseptic dressings are not available, the results of the older practice are quite upon a level with those of modern experience. Even in regard to ulcers, this is also true. But in the case of recently opened abscesses, and especially of open wounds, whether accidentally or intentionally afflicted by the surgeon in his operations, in which the delicate walls of divided and exposed blood-vessels, the cut or lacerated surfaces of the interstices of the areolar tissue, and the torn and lacerated lymphatics are helpless to resist the entrance into the system of infective fluids and organisms, we find that prolonged suppuration, erysipelas, cellulitis, lymphangitis, pyemia, and septicemia, as it were, dogged the footsteps and foiled the handiwork of the most skillful operator of his time.

We have seen that all abscesses, when opened, continued to suppurate freely; whilst in four cases (fourteen being the total number), grave complications arose, one case ending fatally. Again, of twenty-seven cases of accidental wounds, only five healed quickly by the first intention, seven by granulation and free suppuration, and thirteen after prolonged suppuration, cellulitis, or erysipelas, whilst two terminated in death. Lastly, of fifty-four wounds made in operation, eight only united by the first intention, twenty-six closed after granulation and free suppuration, fourteen were cured after the occurrence of erysipelas or cellulitis, with secondary abscesses, and, excluding two unavoidable deaths from extravasation of urine, four died of septicemia or pyemia.

It must be within the experience of every living hospital surgeon that no such calamitous results follow his own practice. It is unnecessary to quote here, in detail, the number and kinds of cases treated in my ward in the year 1883, but the facts relating to those cases, which are carefully reported, show indisputably that abscesses, both acute and chronic, treated by incision, proper drainage and antiseptic dressings, heal with much less

subsequent suppuration, and in less time, than under the open treatment; that accidental wounds, maintained in an aseptic condition, are far less frequently followed by serious complications than formerly happened; and that operation wounds of all kinds heal more quickly and kindly under antiseptic treatment. By way of illustration, it may be mentioned that in twenty-four operations for the removal of new growths, the wounds were healed in five cases between the seventh and tenth days, in seven cases between the fourteenth and twentieth days, in seven cases between the twenth-fifth and thirty-fifth days, in four cases between the forty-third and fifty-fifth days, and in one only, a case of a double operation on a cancerous penis, on the seventy-third day. It must also be added that in no instance was there more than a show of suppuration, and that no case of erysipelas, infective cellulitis, septicemia, or pyæmia, arose, during the year in question, in the wards under my care; yet these diseases were not absent from the hospital, for three cases of pymeia, one of septicemia, and five of erysipelas, originated in other wards, whilst sixteen cases of erysipelas or infective cellulitis were admitted from outside into the proper erysipelas-wards. It must, in justice to the older period when there were no isolation-wards, be granted that some of the cases of injury complicated with erysipelas were already so affected on their admission; but most of those cases, and all those following on operation wounds, arose within the hospital, making a total of at least twenty-four cases of septic disease arising in Liston's wards in 1844-5, against none arising in my wards in 1883. It is easy to trace, in these older records, the frequent and long acknowledged co-existence of endemic and hospital erysipelas, to which a recent joint Franco-German Surgical Commission of inquiry into the effects of that disease has directed attention; and, indeed, it may be said that in Liston's time not only did inflammation, which, like fire, may be a good servant but is a bad master, attack every wound, and free suppuration, which if not a combustive is an exhaustive process, run riot in the wards; but the demon of erysipelas, which so often gained an entrance therein, if it did not strike all the patients, at least hovered over every bed. Its vagaries were well understood; its advent took no one by surprise, and there was one bed in particular, in the corner of a certain ward, in which it most frequently seized its victim. This familiarity with it in hospital practice explains perhaps the promptitude, and, judging from the number of recoveries which followed it, the success with which it was treated when it occurred. But neither it, nor other septic diseases, nor the tendency to undue suppurative inflammation, were efficiently prevented.

On general principles, every surgical patient was subjected, almost in limine, to the inevitable purge, consisting of the nocturnal dose of blue pill or calomel, with colocynth and henbane, and a choice between castor-oil or a black or white saline draught in the morning. Subsequent fever was treated by salines, often combined, even in the later stages, with antimonial wine, and sometimes with the then new remedy, aconite; rigors, sweatings, and exhaustion, were combatted with ammonia or mineral acids, administered in decoction of bark.[1] In the meantime, complete purity of the surroundings, absolute surgical cleanliness, and the exclusion of all noxious substances, were not strictly aimed at, or attained. Sanitary vigilance was dormant, or did not exist; and the dressings, the famous water dressings, alas! were doubtless the constant innocent, but not innocuous vehicles of infection. Liston, as is well known, denounced all resinous plasters as "dirty applications," and all ointments as "greasy abominations," prefixing to these appellations a strong characteristic epithet. Isinglass, plaster, wet lint, and oiled silk, were no doubt neat, and to the eye cleanly; but they were not aseptic. Lint stuffed into open abscesses, sinuses, and carious cavities, or placed for a few hours between the flaps, after an amputation, would certainly contain organized or unorganized extraneous particles; and the water with which it was moistened, surely not previously boiled, would also contain them. The heat and moisture of the living tissues, and of the exudations from them, would favor the development of germs, as well as the formation of lifeless but injurious chemical compounds. To us, the consequences are clear. No change of dressings, however frequent, and no occasional use of chlorina ted lotions, or iodized solutions, would cleanse effectually the microscopic but Augean recesses of the injured tissues. Hence, more or less suppurative action ensues, and more or less deadly agents of infection gained an entrance into the vessels and the blood. Asepticized air, hands, instruments and sponges, together with all the varieties of shortened aseptic ligatures, sutures, and dressings, form

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1 "If morbid spot of septic sore invade,
By Heaven-sent bark the morbid spot is stayed.
—From Rev. Sidney Smith's Poetical Medicine Chest.

a remarkable contrast to Liston's means of treatment. It would be untrue, and a calumny against Nature, to say that these and other antiseptic agencies are everywhere and at all times indispensable necessities of surgical practice. As narrated to me by a French surgeon, an eye-witness to the facts of an African campaign, an Arab's cheek, all but sliced off and hanging down, may be stitched up in its place, and bandaged with strips from his own cotton garments, and may then unite by the first intention, with scarcely a drop of exudation; and I have been told of a gentleman colonist in Australia who cut open his knee-joint in felling a gum tree, sewed up the wound himself, and put on a black-splint, before the nearest surgeon, who resided sixty miles off could arrive, and was cured "straight off," without suppuration, preserving a perfectly useful limb. Union with the first intention occurred long before the antiseptic system was devised; and it occurs still without its aid. But in formidable operations anywhere, and in most operations in hospitals, it is a safe and therefore an incumbent provision to adopt. In this view, adequate hospital expenditure for antiseptics is fully justified. Their employment shortens the period of cure, limits the amount of suppuration, diminishes the drain upon the bodily strength, lessens the risk of complications and the chances of future organic degenerations, and thus contributes to a more rapid, complete, and lasting recovery.

As anesthetics encourage patients to submit more frequently, willingly, and hopefully to more and more serious operations, so antiseptics have emboldened surgeons to attempt, and enabled them to succeeed in, enterprises formerly considered hopeless and unjustifiable. When I remember Liston's grave and despairing looks at his too frequent disappointments, I welcome the confident glance and triumphant expression of many a modern operator.

Of the three great cavities of the body, the abdomen, with its membranous coverings, the least protected and most accessible, containing parts less immediately essential to life, and yet, from its size and the extent of its lining membrane, the most prone to a rapidly fatal inflammation, was the first to be entered by the properly aseptic hand; next, the thorax, with its half-bony and half-membranous walls, and therefore better protected and less open to access, containing parts more immediately necessary to life, but lined by a membrane of smaller extent, and subject to less formidable inflammatory reaction, yielded entrance to the antiseptic method of procedure; and, lastly, the cranio-spinal cavity, the smallest, the most perfectly enclosed, the best protected, enclosing organs of vital essentiality, and yet lined by a membrane of moderate proclivity to disease, has also been invaded by the new surgery, under the guidance of an improved diagnosis, in search of removable disease. Even the cervical region, which, though not designated a cavity, is nevertheless, a specially adapted part of the general cavity of the body, has become the field for the employment of aseptic methods.

It might thus seem as if surgical enterprise and skill, applied to the trunk as contrasted with the limbs, had reached their utmost attainable limits; but it cannot be so. Already the cry is for still greater security against the consequences of irritant and septic influences. That this will be obtained in the future, no one can doubt.

Forty years since Liston was deprived of our present advantages, and suffered accordingly; but his dexterity and fame as an operator, his desire to simplify all surgical proceedings, his lasting devotion to and sound knowledge of anatomy, and his interest in the then opening science of pathology, require no vindication at my hands. May the next forty years witness as great advances as have been realized since his death; and, in the future, may the reputation of British surgeons, and the triumphs of British surgery, be maintained by our successors with undiminished lustre!

ITEMS.

—An Heroic Cure for the Opium Habit.—A pathetic story has lately come to my knowledge of a young man, an under-graduate in an Eastern college, who had become a victim of the hypodermic use of morphia. He went with his father, who was engaged in the lumbering interest, into the primeval forests of Maine, hoping that during a stay of months with the wood-choppers he would be able to fight out the battle of gradual abandonment successfully. Through a strange fatality, when the party had just arrived at their camping-place and were transporting their goods across a stream, the case of morphia was broken by an apparent accident, and its contents scattered into the water. None but the haggard young man could, at the moment, comprehend the appalling magnitude of the calamity—there, as he was, two hundred miles from the nearest settlement! He survived the terrible ordeal, but no words could express, he has said, the tortures

and agony through which he passed during the succeeding weeks. He was closely watched, else, at times, he would have drowned himself or have beaten his brains out upon the rocks. Months afterward he came back to the world a skeleton, worn and haggard, from his terrible contest. It was an experience to which he could never afterward refer without the most painful emotions.

Not the least significant point in this veritable account, is the fact that the young man always believed that his father had purposely brought about the catastrophe for the sake of bringing matters to a speedy end! Has the usual treatment of the disease by physicians at this day anything to offer that is much better than this man's summary method?—Popular Science Monthly.

—Nitro-Glycerine in the Treatment of Inter stitial Nephritis.—As opposed to the theory that a sufficient urinary excretion is kept up by the increased arterial pressure consequent upon the cardiac hypertrophy, Rossbach ("Berl. Klin. Woch."; Union Méd.") adduces the results which he produced with nitro-glycerine in three cases of contracted kidney, in which the patients had increased arterial tension, albuminuric retinitis, uremic asthma, and the general ill-health characteristic of generalized and advanced arterial sclerosis. In spite of the lowered tension produced by the drug, the uremic symptoms were diminished, the urine was increased in amount, the albuminuria became less evident, and the retinitis grew less marked and less troublesome.—N. Y. Med. Jour.

—The Bees and Apollo: A Medico-Pharmaceutical Fable.—Once upon a time the busy bees were gathering honey from a flowery field on famed Hymettus. Suddenly one bee was heard to buzz much more loudly than the rest of his companions, who, upon listening, heard that he had found a new process for extracting a superior honey of remarkable medical properties. He had also, at the same time, invented a very ingenious way by which he could with comparative ease make his buzz sound four times as loud as that of the ordinary bee. By means of these inventions he soon disposed of large quantities of honey at a high price. But one day Apollo, who was experienced in the matter of honey and its medical properties, came that way seeking some good sample for the use of his friend Diana, who was a little ill. He looked at the new preparation, which was put up in soft capsules and called "honeyine," and at another kind which was put up in chocolate tablets and called "honeyidea." He also listened to the new buzz. "I think," he said finally, "that the buzz is much more wonderful and effective than the honey: I will take it to Diana, who is fond of buzzing."

Some days later Æsop, on hearing this story, remarked that the moral which he should add was, that the art of advertising a new medical preparation is of more importance than the art of making it.—Boston Med. and Surg. Journal.

—Who Owns the Prescription?—This question has been asked so many times that it is now in order to set it at rest forever. The Supreme Courts of Massachusetts and of New York have ruled as follows:

"The question before the Court seems to be very simple, indeed. A patient applies to a physician and receives from him certain advice, for which he tenders a fee. The physician hands a piece of paper to the patient, purporting to be a written order for certain goods, called drugs, which order is filled by a merchant or apothecary. The payment of the fee, and the delivery of the goods, or drugs, terminates the verbal contract, and the druggist keeps the prescription as evidence that the contract has been fulfilled, as far as he is concerned. The druggist can, if he so please, on his own responsibility, renew the drugs, for he is but a merchant, and has a perfect right to sell drugs to any one and in any shape. He need not keep the prescription, nor is he bound to give a copy, but, should error occur, he has no protection in case of suit."

From this it would appear that a prescription is but an order for drugs, and the delivery of the drugs settles the matter.

—An Ointment for Intertrigo.—In a recent discussion at the Paris Société de Thérapeutique, M. Campardon ("Prog. Méd.") states that an ointment made after the following formula had answered well in his experience:

Borax - - - - -	30 grains
Oil of wintergreen - -	10 drops
Vaseline - - - -	7½ drams.

—N. Y. Med. Jour.

—The Medical Record says: "The last census report shows that the men and women of Kentucky are the tallest in the world, owing, we doubt not, to their good doctors and their Bluegrass whiskey; which reminds us of the observation of an acute phhsiologist who says that man is composed of one part solids and two parts water, unless he is born in Kentucky."

—In a case of chronic psoriasis of eleven years' duration, and which had during this time baffled all treatment, Prof. DaCosta placed the patient, a young man of 22 years, on Donovan's solution, gtt. x. t. d., to be increased to gtt. xx. t. d.; the object being to produce the full physiological action of the remedy.

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TREATMENT OF ALBUMINURIA.

In our last issue we presented an abstract of Senator's paper relating to the causes and varieties of albuminuria. In this connection Senator proceeds to discuss the treatment and states that good results are the rule in all those cases in which the causes are removable. This is the case in many instances of disturbance of the renal circulation; febrile albuminuria usually passes away with the pyrexia; and the albuminuria of anemia, and of nervous disease is wont to yield with the amelioration of the exciting cause.

In true renal lesions, the acute ones are of better prognosis, as regards albuminuria, than the chronic conditions. Acute lesions may terminate in perfect restoration of the tissue and therewith the albuminous loss ceases: In chronic trouble the continued presence of albumen is indicative of a continued tissue-impairment, even should all other symptoms have yielded.

The albuminous waste in itself is, according to Senator, of no great significance. The older view that this waste necessarily portends a serious impairment of the general condition is all wrong. The amounts of albumen lost in most grave conditions of albuminuria rarely exceeds ten to fifteen grm. In fact these figures are reached in chronic conditions only at times. In support of his view Senator refers to the colossal amounts of albumen lost in conditions of chronic cystitis. Still no one regards the albuminous waste in cystitis as a matter of any apprehension.

The fear of the consequences of albuminuria takes rise in the anemia observed usually in such patients; but this anemic state is due to other causes entirely.

After this introduction Senator concludes that the albuminous waste constitutes no reason why patients with chronic nephritis should be fed on albumen. On the contrary, thereby the albuminuria must be increased and the dangers of uremic intoxication become still greater, inasmuch as the kidneys are the organs of elimination of the nitrogenous refuse of the economy. Increase of albuminous food necessarily puts a greater tax upon the function of these organs.

This, says Senator, is not a theoretical deduction, but a clinical fact. The proof can be adduced in such cases of acute or subacute nephritis in which the improvement under proper treatment has resulted in a diminution of the albuminous excretion. The introduction of large amounts of albumen is followed at once by increased albumen in the urine. Chronic nephritis is not so suitable to demonstrate this fact, because the albuminuria is very vacillating in such cases. In fact some argue that nitrogenous diet is of no evil influence in the chronic conditions. Thus Oertel observed in a case of Bright's disease that the consumption of eggs in large numbers was not followed by an increase, but by a positive decrease, of the albuminous excretion. But, argues Senator, to generalize from one such instance that albuminous food is of no influence in albuminuria would be as wrong as the conclusion that the carbohydrates are innocent food in diabetes, merely because some diabetics may use such food in given amounts without injury.

Penzoldt has observed, that a dog, who had albuminuria, lost more albumen when fed on meat than on bread. Such positive facts speak clearly in favor of withdrawing the albuminates to the lowest possible limit, thereby curtailing the excrementitious products. To this end a diet

of milk, of carbo-hydrates, fats and glutens is advisable. The selection must be made in accordance with the demands and indications.

A second matter that must be seriously considered is muscular exertion. Undue physical exercise may produce albuminuria in the healthy; and clinical experience teaches that albuminuria may disappear entirely while a patient is kept in bed, and reappears as soon as he is permitted to move about.

And in this connection it is important to caution against cold baths and cold drafts of air, that chill the cutaneous surface; and sychical disturbance should be carefully guarded against.

All of these dietetic directions, i. e., reduction of albuminous food and of physical exertion and avoidance of chilling of the surface, are in order if the albuminous loss is the most striking symptom and no other indications are manifest that would demand a change of treatment. Thus, if the albuminuria is due to anemia it would be folly to discard the dietetic regimen necessary to such a case, in order to fight the albuminuria according to the above indicated principles; or, if the albuminuria is of febrile origin, to set aside cold baths, merely because they may, under certain conditions, increase albuminuria; again to attempt to overcome albuminuria due to circulatory interference by dietary measures, instead of looking to the correction of the circulation.

In conclusion, Senator says pointedly that of drugs there is not a single one of efficiency. But there are medicines that may be of benefit, and these should not be left out of sight when we deal with such a case. He refers to iodine and iron and to certain spas. Then, too, he calls attention to the benefits in many forms of chronic albuminuria of a warm and equable climate.

Levis's Metallic Splints.

R. J. Levis, M. D., Surgeon to the Pennsylvania Hospital and to Jefferson College Hospital, has devised a splint for fracture of the lower end of the radius. It is made in two sizes, for adults and children, a right and left splint of each size making up the complete set. J. Elwood Lee, of Conshohocken, Pa., manufactures them under Dr Levis's directions. We quote from an article by Dr. Levis, as follows:

"The correct nature and mechanism of the ordinary form of fracture of the lower end of the radius is now, after much controversy, generally admitted and properly comprehended. With this proper understanding the indications of treatment become rational and decisive.

In the usual and very characteristic fracture of the carpal end of the radius, the primary line of the fracture, is, with little tendency to deviation, transverse in direction. Associated lines of fracture are generally those of comminution of the lower fragment, and are caused by the upper fragment being driven vertically into it and splitting it, usually in directions towards its articular surface.

The displacement of the lower fragment is towards the dorsal aspect of the forearm, and its articular surface is inclined in the same direction, abnormally presenting backwards and upwards.

The mechanism of the fracture is its production by falls upon the palm of the hand, which, with the carpus, undergoes extreme extension, and the fracture is cansed by an act of leverage or transverse strain. This direction of force has also been called cross-breaking strain.

In this fracture, actual displacement of the lower fragment may not exist at all, or it may be to the extent of complete separation from contact of the broken surfaces, varrying with the amount of force applied and with the retaining influence of the surrounding dense structures.

The first essential of the treatment of fracture of the lower end of the radius is the complete reduction of the displacement. The action of replacement must be directed to the lower fragment itself. The reduction of the fracture can usually be thoroughly effected, under anesthesia, by strong extension applied

to the hand, associated with forced flexion of the wrist, and with pressure applied directly on the dorsal surface of the lower fragment. Unless vertical splitting or comminution of the lower fragments exists, the maintaining of partial flexion of the wrist, with pressure of a pad on the dorsal surface of the fragment, will prevent return of deformity.

With the object of retaining the apposition of the fractured surfaces, by overcoming displacing forces, I have practiced for many years on the principles involved in the splint here illustrated, the application of which will not require much description.

In the treatment of fracture of the lower end of the radius it is essential that proper allowance be made for the curvature of the anterior or palmar surface of this part of the bone. This is insured in the splint which I have devised, which follows correctly the radial curvature; and the fixing of the thenar

and hypothenar eminences of the hand in their moulded beds, maintains the splint immovably in its correct position with reference to the radial curve.

To neglect of complete primary reduction of the displacement of the lower fragment, and to inefficient restoration and retention of the normal radial curve, are due the frequent unfortunate sequences of this fracture.

The splint is made of copper, so as to be readily comformable by bending to suit the peculiarities of size and of form of forearms. The slight roughness left on back of splint from perforations is for the purpose of keeping the bandage from slipping. It is nickel-plated to prevent oxidation.

The splint will usually fit the forearm so accurately that but little padding will be required, and a piece of woven lint, or of cotton or woolen flannel is all that is necessary for its lining. No dorsal splint is needed, but, as before referred to, a small pad will, in most cases, be required over the dorsal surface of the lower fragment. For retention of the splint an ordinary bandage, two inches and a half to three inches wide, is all that is necessary.

This splint has the merits of being applicable to all cases of fracture of the lower end of the radius, and also to many other injuries involving the forearm and wrist, and, as now supplied, is very inexpensive."

A Case of Empyema.

Dr. John Schilling, of Montrose, Mo., writes us the following details of an interesting case:

"Herman Kl., aet. 18, took sick March 13, 1883, with pneumonia. This was followed by empyema on the left side. On July 5th, about a quart of pus was aspirated. July 18, a swelling six inches below and to the left of the nipple was incised. A fistula then developed which discharged till November. Then it closed and a second, but insufficient, lancing gave rise to a second fistula, the first having reopened. The discharge became offensive later on, and the boy was on the verge of the grave. Feb. 7, 1884, he was taken to a St. Louis Hospital. There a piece of the eighth rib was resected, and two quarts of stinking pus let out. The patient now improved rapidly; in fact the wound healed too soon and pus accumulated again in the pleural cavity.

May 31, I made a long incision over the place of the resection. The escaping pus was pure and amounted to three quarts this time. Drainage and washing the sac with a three per cent carbolic acid solution was kept up till Aug. 30, when the rubber tube (a piece of catheter) was removed. The fistula closed completely Nov. 12. The boy's weight rose from ninety-five pounds June 1, to 144 pounds Nov. 15. The left lung has regained its functions, although it was compressed over a year. I think it necessary to leave the tubes and keep up a disinfecting wash until the cavity has nearly contracted."

Esophagotomy.—Dr. George Lawson reports the following successful case in Medical Press and Circular:

The patient, a milkwoman, aged fifty-five, was admitted into Queen Ward, Middlesex Hospital, on January 14, 1885, having about half an hour previously swallowed a vulcanite plate with three artificial teeth. On examination, externally, something hard could be felt in the esophagus about the level of the cricoid cartilage by deep pressure with the finger on the left side of the neck. Mr. Lawson endeavored to remove the foreign body with a pair of long curved esophagus forceps, but although he could feel the plate, yet he could not grasp it, so he decided at once to open the esophagus. This he did through an incision about three inches in length along the lower prominent border of the sterno-mastoid muscle. The sterno-mastoid and the omo-hyoid with the investing sheaths were drawn outward, while his colleague, Mr. Gould, drew the trachea in the opposite direction, and with his fingers on the right side of the neck pressed the esophagus toward the incision. The esophagus was now visible, and the plate could be easily felt with the fingers. A vertical incision was then made in the esophagus on to the plate, which was seized with a pair of forceps, but it was so firmly fixed into the wall of the esophagus by the clips which had held it to the neighboring teeth that it could not readily be extracted through the incision. Mr. Lawson then slightly enlarged the opening, and, having first divided the plate with a pair of bone forceps, removed it in two portions. In the operation one of the thyroid arteries was divided and bled rather freely. No sutures were put into the esophagus, as, owing to the wound in its being somewhat lacerated from the drawing through it such a sharp irregular body, Mr. Lawson thought that the parts would fall together better than he could adjust them. The superficial wound was then partially closed with sutures and covered with boracic lint charpie, over which was placed carbolic gauze and oil silk. The patient was ordered to be fed with nutrient enemas and Slinger's nutrient meat suppositories. No food was to be taken by the mouth, but from time to time the lips and tongue might be sponged with ice-water to allay thirst. On the following morning the wound was dressed, and there was found to be a very free discharge of saliva and mucus through the wound. The patient was fed solely by the bowel for the first four days, but feeling then very much exhausted she was allowed to take in addition some of Brand's essence of meat, but a large portion of what was taken by the mouth escaped through the wound. On the 19th, the fifth day after the operation, some redness appeared around the wound, and this increased for two or three days. This was followed by an offensive discharge, with some slough of cellular tissue. On the 20th, the seventh day after the operation, as much of the fluid taken by the mouth continued to escape by the wound, Mr. Lawson introduced an esophagus-tube with a funnel-shaped extremity which projected about six inches from the mouth. This was kept in, and through it the patient was regularly fed. The tube was worn until February 8th, when, as the wound in the esophagus was apparently closed, it was removed. During this period the tube was changed about every four or five days for purposes of cleanliness. For about a fortnight after the patient ceased to wear the tube it was introduced four or five times during the twenty-four hours for administering food, as the ex-

ternal wound had not completely cicatrized. On February 22d the external wound was healed, and the patient since then has been able to take her food as usual. She has left the hospital and is now quite well.

Calomel in the Treatment of Otorrhea.—Dr. J. Gottstein, in the Archives of Otology, strongly recommends the use of calomel in the treatment of otorrhea. He says: During the past year I have used the calomel by way of trial in a number of cases that have seemed suitable, especially such as could be submitted to daily observation.

I have satisfied myself (1)that the remedy is absolutely free from irritation to the mucous membrane of the middle ear; (2) that it forms neither upon nor in the mucous membrane any precipitate difficult of removal; (3) that surprising results are often obtained under its use.

Accordingly, since the beginning of the present year, I have, in my private practice as well as in my polyclinic, employed calomel in the treatment of all cases of otorrhea in which, following Bezold's direction, I had previously made use of boric acid alone, or as a supplementary means. I withheld the calomel only from such patients as, coming from a distance, I had an opportunity to see but once.

My observations now exceed eighty in number, so that I feel justified in communicating the results of my experience with this method.

My method of procedure is as follows: The ear is, in the usual way, syringed carefully with a weak sublimate solution (one-tenth per cent) ; the residue of the secretion is forced into the external meatus by the employment of Politzer's method, and then removed by syringing; and, finally, the ear-well is dried with cotton.

The calomel (vapore parat.) is then blown in through a powder-blower, anc thd auditory canal closed as well as possible by means of cotton. The further treatment is the same as with the boric acid.

That on which I lay the most stress is that calomel, in my opinion, has a much more certain and decided antiseptic action than the boric acid.

I am anxious to avoid the error into which those authors fall who over-estimate the value of the remedies recommended by them. Calomel also fails in some of the cases in which powerful antiseptic action is desired, because considerable tissue alterations in the drum cavity are absent. Yet I have, with no method of treatment, not even with the boric acid, attained such speedy results as with this remedy in acute as well as in chronic forms of otorrhea.

The calomel is also suitable, as is the boric acid, for employment after operations in the middle ear, cauterization with nitrate of silver, the use of the galvano-cautery and in conjunction with the alcohol treatment. In these cases, the powerful antiseptic action of the remedy is conspicuous.

Cholera at Marseilles.—According to the Paris correspondent of the British Medical Journal M. Brouardel has read, before the Académie de Médecine, his report on the cholera at Marseilles. Three months beforeAsiatic cholera appeared, violent diarrhea was prevalent. This condition was coincident with the sudden appearance of very hot weather. On August 2nd or 3, cholera had positively appeared. No clue could be found to the importation of the malady, but all the districts where it appeared last year were again invaded by it. The same deplorable sanitatation exists. The port is the same as described last year. In the houses built on it, seaeral hundred people are massed together. Every kind of offensive refuse is thrown out on to the ground. All the refuse of the neigboring houses flows in the courtyard of a school immediately behind the Hôtel de Ville. Private individuals are so persistently and immoderately dirty in their habits, that no measures have been taken to improve their sanitation. At Marseilles, the municipality have very little power to prevent private individuals from soiling the city. M. Brouardel proposed to the Académie de

Mèdecine to vote that the law of 1880 should be rendered complete, and the reform it had in view effected. The vote was carried unanimously.

A Scandalous Affair.—The following sickening recital is made by the Paris correspondent of the British Medical Journal in reference to the case of Dr. Depasse, who is accused of leaving a woman without medical aid during parturition, because her husband could not pay him 250 francs, creating a great deal of interest. According to the midwife, who commenced the delivery, the presentation was abnormal; therefore an operation was necessary, and the husband of the patient applied at the night-service department for a medical man. Dr. Depasse returned with him, said it was a very serious case, and required 250 francs before commencing the operation. The applicant, M. F., offered 100 francs—£4—all he possessed. Dr. Depasse required £10. The midwife implored him to deliver the woman, but he replied "Go to the hospital." The midwife observed that it was impossible to remove the patient to a hospital. Dr. Depasse answered that he could not operate until the morning. He resisted all entreaties, and left the house, saying he would return at 8 o'clock, and operate under the conditions already stated. M. F. sought for another medical man. It was 5 o'clock in the morning when he reached Mme. F.'s bedside. After examining her he said, "It is too late." The poor woman died. At 7 o'clock the same morning, M. F. wrote to the mayor of his arrondissement, who directed him to inform the Dean of the Medical Faculty. However, after useless communication, he learned that his complaint must be made to the Procureur de la Republique. M. DePasse writes to one of the daily papers to exculpate himself. He says the family refused to remove the patient to the hospital. As his night-service was finished he went away, saying he would return at 7 o'clock. In order to operate, it was necessary to have help, chloroform; and instruments, and the family was unable to meet the necessary expense. Whenever he could operate single handed he did so, without charging any fees. He trusts to his ten years' of personal devotion to his duties, and medical services giaing gratis, and frequently supplemented by gifts of money, to exonerate him from the charge of cupidity which the daily papers bring against him. The sensation caused by this painful occurrence has been instrumental in bringing to light other alleged cases of a similar nature.

The Treaement of Lupus in Prague.—Dr. Charles C. Ransom writes to the New York Medical Record from Prague, giving an account of the treatment of lupus as practiced by Professor Pick of that city:

"This method is founded upon the theory that lupus is an infectious disease due to the presence of a bacillus, probably the tubercle bacillus, which finds lodgment in the corium. The absolute proof of this theory is wanting, since, as yet, experiment has failed to show that lupus can be produced by inoculation of the tubercle bacillus in the skin. But the weight of evidence from clinical observation and histological investigation is so strong as to leave little doubt but that lupus is a form of tuberculosis. The indication for treatment, based upon this theory of the etiology, is plainly to destroy the bacillus. Since no agent has yet been discovered which will directly kill the parasite without at the same time producing the death of the tissue in which it resides, it is necessary to work for this end indirectly by the production of cicatrical tissue at the seat of disease, and thus cutting off the blood-supply upon which the bacillus depends for its existence and development. But it is desirable, while occluding the capillaries, to avoid disfigurement in those cases in which the face is the seat of the disease. Professor Pick has found, after a long series of experiments with different chemical caustics, that potassa is the best, as the resulting scar is less richly supplied with blood-vessels than that following the employment of other caustics, such as arsenious acid, corrosive sublimate, nitrate of silver, and the

like. This is accordingly used by him in parts where the deformity is not a matter of importance. In lupus of the face, however, in cases in which the disease itself has not already produced irremediable disfigurement, he employs the method of scarification, with the three- or four-bladed lupotome of Veiel, in combination with the galvano-cautery. The patient is subjected to the scarification every other day, a new part being selected at each sitting until that first operated upon is healed. The incisions are carried just through the diseased part into the firm healthy tissue beneath. The amount of surface operated upon each time depends much upon the endurance of the patient. When the part first scarified is healed, the operation is repeated, the cuts being made so as to cross the first ones. The wounds made by the lupotome are dressed with an antiseptic solution. The first part of the treatment is continued until the entire surface involved in the morbid process is converted into cicatricial tissue. In this will now be noticed numerous little lupus nodules, the size of a mustard-seed, which are destroyed with the galvano-cautery needle. But little use is made of anesthetics, as they have been found impracticable; cocaine was extensively tried last winter, but gave little or no satisfaction. Dr. Ransom reports a number of cases in which he was able to verify the favorable results claimed for this mode of treatment. They were some of the more severe cases which he saw at Professor Pick's clinic, and in every one the result was most satisfactory. The ulcerations, when they existed, were healed, and the nodules and points of infiltration were completely eradicated. The resulting cicatrix was smooth and flexible, of a lightish color, and in no way deforming, except, of course, in those cases in which there had been loss of tissue prior to the commencement of treatment. The permanence of the cure is shown by numerous patients, who report from time to time, upon whom the scarifications were practised ten or fifteen years ago."

Prolapsus of the Rectum.—In the Polyclinic for June 16, 1885, appears an excellent clinical lecture by Prof. C. B. Nancrede, of Philadelphia, relating to this subject, from which the Virginia Medical Monthly makes the following abstract:

After speaking of this condition of the bowel in young children, and some of the causes for its occurrence, he went on to relate the details of his general treatment in such cases. He called attention to the paramount importance of not allowing the child to strain at stool, nor even to sit any length of time, on such occasions. The motions should only be passed lying on the side, at the edge of the bed, or even standing, and, whichever position was employed, traction should be firmly made upon one buttock, so as to tighten the anal orifice. The credit of this valuable aid to treatment he gave to Dr. H. Macormac of Ireland, who first showed its worth to the profession in 1843. The lecturer advised the invariable use of a plain enema of cold water before each rectal action, with a thorough bathing of parts the with cold water afterward. An unirritating astringent injection should be thrown up into the rectum, such as a decoction of white oak bark, or a solution of the sulphate or sub-sulphate of iron. He went on further to speak of the various mechanical appliances which have been suggested to retain the prolapsed bowel in place, after returning it to the rectum. A pan of oakum or tow, or, better than either, a piece of soft sponge, should he placed over the anus, and the buttocks firmly pressed together and retained in position by a broad transverse strip of adhesive plaster. This pad, however, should be used only in those cases where the skin is not irritated; and when, despite the careful bathing of the parts in alcohol, it does become inflamed, some one of the many anal trusses must be resorted to, if the case is a very old or desperate one, otherwise an operation for the radical cure of the affection should be performed,

In answer to the question as to which cases had best be operated upon, he could only say, those in which palliative measures are either

inapplicable or inoperative. As to the method of operating, he called attention to the study of the pathology of the affection for a proper understanding of the subject. When from any cause the mucous coat of the rectum has slipped away from the muscular coat, on account of tbe elongation and laxness of the sub-mucous coat, this condition (prolapsus) is of course established. Now, naturally enough, anything which will set up a certain degree of plastic inflammation in that sub-mucous coat, will glue together, as it were, the mucous and sub-mucous coats, thus producing a cure —always provided the sphincter ani muscle is not in a condition of atony or fatty atrophy.

The lecturer then referred to the different means of producing the necessary plastic inflammation and clinically described the operation he preferred as the safest and most expeditious. After etherizing the patient and elevating the hips upon a pillow, he reduces the prolapsed part, and introduces a large sized Sims' speculum. Then with the thermo-cautery, at a dull red heat, he draws three or four lines, commencing about two inches within the anus, and bringing them down to the delicate muco-cutaneous margin. An opium suppository and a pad and bandage, complete the operation. The lines mentioned may be drawn with a pointed glass rod dipped in nitric acid, or the actual cautery, or the galvano-cautery may be employed, but in his opinion neither equaled the thermo-cautery for simplicity and safety.

He called attention to the importance of the after treatment. The patient must retain the recumbent position for at least a week, all stools being passed in lateral position, or into a bed pan; and even after leaving the bed the bowels had best be moved in one of these ways for a week or ten days longer, all symptoms of costiveness being relieved by enemata rather than purgatives. Care should be taken for months afterward to keep the buttocks as closely together as possible during an operation of the bowels.

Should the first operation fail to produce a radical cure, a second may be performed, and new lines can be drawn between the old ones, or a series of scattered points may be touched with the cautery, great care being exercised, however, not to destroy too much tissue lest a stricture result.

Rhus Aromatica in Enuresis. — Dr. George W. Willeford, of Glendale, Ind., writes to the Medical Record:

"In the limited experience had in the treatment of enuresis in the past two or three years, as it has occurred in a country practice, I have found the fluid extract of rhus aromatica to give permanent relief in seventy-five per cent. of the cases treated, and to greatly benefit the remaining twenty-five per cent. As the article is comparatively a 'new remedy,' I have no doubt that there are many excellent practitioners who have never given it a trial. To those who are sorely puzzled to know what remedy to 'try next' in obstinate cases of enuresis, I will say, try a good preparation of the fluid extract of rhus aromatica, and you will find in it a pleasant and generally an efficient remedy."

Carbolic Acid Hypodermically in Ague. —The American Medical Digest writes that Dr. Diculapy recently communicated to the Société Mèdicale des Hôpitaux, of Paris, a case of tertian ague, which, failing to yield to quinine, was cured by carbolic acid administered subcutaneously. On the first day the doctor injected 2 1-2 centigrammes of the acid dissolved in 100 parts of water. The quantity was increased on the following day to five centigrammes, and to seven on the days of apyrexia. Recovery was complete at the end of seventeen days. The patient had then absorbed eighty-four centigrammes of carbolic acid, without exhibiting any toxic symptoms.

Piles and Fissured Anus.—Says the National Druggist: "No pain is more atrocious than that of hemorrhoids, especially when accompanied by fissured anus, and any remedy which promises relief in such cases is hailed as a Godsend by not only the patient, but by the physician who is so unfortunate to ever

have had charge of a case. For this reason the thesis of M. Pauzet, recently sustained in Paris, and published in the Paris Mèdical, will have more attractions than theses usually possess to the general medical reader. Briefly stated, it claims that two 3-grain pills of the extract of capsicum annum,taken every morning and evening, will calm the pain and cure the disease. M. Pauzet refers to Drs. Dujardin Beaumetz, Constantin Paul, and others equally noted, for the confirmation of his statement.

The following is the treatment of a case in detail, as reported in the Paris Mèdical: The patient, a woman, was ordered two pills of extract of capsicum annum of 3 grains each every morning and evening. On going to bed she took a small dose of salts or a podophyllin pill, and in the morning before going to stool she injected the lower bowel with warm eau de guimauve (marshmallow). In five days natural functions were re-established without pain."

Salicylate of Cocaine in the Treatment of Trigeminal Neuralgia.—The New York Medical Journal writes: "Schneider (Allg. med. Ctrl.-Ztg.; Ctrlbl. f. d. ges. Therap.) relates the case of a woman in her third attack of neuralgia of the second and third branches of the trigeminus. The first attack, five years before, had been treated successfully with large doses of quinine. The second attack lasted almost six months; quinine was of no avail, but the pain gradually disappeared under the use of morphine and iron. The third attack continued four weeks, when the author injected salicylate of cocaine experimentally. The effect was extraordinary; six grains of the salicylate, injected into the cheek, caused the pain to disappear entirely, and occasioned a general feeling of well-being wholly free from any unpleasant collateral phenomena. The injection itself was painless and did not give rise to irritation. The patient was enabled to sleep at night, although before the pain had been most severe at night. Eight such injections were given in the course of six days, and after that there was no pain except at the site of the injections, which was overcome by three applications of galvanism with the anode applied to the seat of the pain and the cathode to the back of the neck."

Lactic Acid Treatment of Tuberculous Deposits.—Dr. H. Krause in the Berlner Klinische Wocheuschrift (Medical Times) highly recommends the application of lactic acid to the laryngeal ulceration and swelling caused by tuberculous deposit. He begins with a ten per cent. solution, and rapidly increases it to eighty per cent. A number of cases are reported in which the ulceration was completely cured by these applications, notwithstanding the presence of tubercle bacilli. In view of the unfavorable course which such cases generally pursue and the failure of all other treatment, the author thinks this is a decided step in advance. He also believes that lactic acid will be found useful in other disorders of the throat.

Nurses' Sore Mouth.—In the Amer. Med. Journ. (Analectic), we read: In all cases of nursing sore mouth, there may be found, upon careful inquiry, wrong of the uterus. There is nearly always more or less leucorrhea, and the discharge is frequently of an offensive, irritating character. The internal administration of eupatorium, alternated or combined with hydrastis, will always help in such cases, and they will many times accomplish everything desired.

℞. Mother tincture of eupatorium aromaticum, ʒij.
Fluid extract of hydrastis, ʒij.
Water, - - ℥iiiss. M.
Sig.—One teaspoonful every hour.

It is surprising to see how rapidly some cases of sore mouth heal under the influence of this simple prescription. The burning mouth and tongue are cooled; the leucorrheal disch a is modifie, lessened, and not infrequently entirely stopped; and the nervous element of the disease, characterized by morbid watchfulness, throbbing headache, etc., is

perfectly controlled in most cases. Eupatorium is said to be a remedy for nervousness, but we have never observed that its virtues were very marked in this regard except in this terrible disease, so frequently met with in nursing women, but here it certainly is a first-class remedy.

CONTRIBUTION.

PHYSIOLOGICAL ACTION OF HYDROCHLORATE OF COCAINE.

BY LOUIS BAUER, M. D., M. R. C. S., ENGLAND.

Prof. of Surgery of the St. Louis College of Physicians and Surgeons. Read at the Meeting of the Mississippi Valley Medical Society.

If not mistaken, it was Koller, of Vienna, who called the attention of the profession to the anesthetic action of the hydrochlorate of cocaine not quite a year ago. Within that short period it has acquired general recognition. From all quarters of the globe we receive the assurance of its incomparable utility as a local anesthetic, more especially upon the mucous membranes.

No one seems to have failed in reducing the sensibility to temporary annihilation. With its aid by mere transient application of a few drops of a weak solution (five per cent) numerous operations have been performed upon and within the apertures of the body without any pain.

No wonder that so beneficial a preparation should have rapidly captured the confidence of the professional world.

As a local anesthetic, hydrochlorate of cocaine has established its reputation beyond dispute. By comparison it is the safest, surest and most agreeable of the local anesthetics.

It is hardly to be assumed that cocaine should have been totally ignored as an internal remedy. Even in the limited field of my professional observation, I have heard of its introduction into the system per os and by hypodermic injection in varied nervous disorders, as hysteria, melancholia, prostration, the effects of chronic alcoholism, etc.

Prof. Bauduy has even observed the physiological actions of larger doses of cocaine upon a patient whom he had under his observation. But all these efforts seem to have been exceptional and far between.

As it is in St. Louis, so it appears to have been elsewhere. At any rate, and judging from medical journals that have come under my notice, and from retrospects from both at home and abroad, a systematic investigation, with comparative experiments, has as yet not been undertaken.

At least, such efforts have not come under my notice. Under these circumstances I feel justified to add to our scanty knowledge my observation which I have had lately the opportunity of making in a case of cocaine habit.

The very fact that our patient in a period of not quite seven months had consumed about seven hundred grains of cocaine, and, at times, in very large doses, would seem sufficient to insure your interest and attention.

Before the patient had entrusted me with his case, I had occasionally observed peculiarities in his appearance. As soon as he became aware that he was the object of close observation, he studiously avoided meeting me. At last the patient made me his confidant and confessed his cocaine habit, to which he had then been addicted for about seven months.

I had certainly not been prepared for this disclosure. In fact, I know so little about the physiological and therapeutical action of cocaine as to be unable to suggest any specific antidote.

The best I could do under prevailing circumstances was to inform myself and give the benefit of my study to the patient, besides keeping him under close clinical surveillance.

A brief historical review discloses the following:

The patient descends from a confirmed drunkard; he himself has found whisky of alluring taste, as early as his thirteenth year: at twenty-five it was indispensable to his comfort and happiness; with a few intermissions of varied duration, he has been the slave of alcoholic abuse up to the beginning of January last.

On the ninth of that month he had freely imbibed the indispensable beverage. The last draught of ardent liquor consisted in a pint of gin. He had then just enough to submit to a hypodermic injection of cocaine, under the promise that it would relieve him of a rousing head-ache, and possibly quench his appetite for the firewater forever. Unfortunately, the physician disclosed the name of the remedy, which enabled the patient to procure the article for himself and apply the same on his own responsibility. Thenceforward he used the cocaine by hypodermic injections, increasing the doses from the one-

fifth part of a grain to ten grains at a time, and very soon he found himself in a condition that demanded the continuous use of the drug.

Small doses of from five to ten drops of a five per cent solution produced very mild effects, sufficiently marked, however, to be fully realized by the patient. With the increasing doses, frequently repeated, the action of the cocaine became very intensified, and the reaction was most depressing and disturbing to the patient; as in alcoholism, large doses were required to bridge over the horrible sensations which followed the antecedent application.

In enumerating the physiological effects of large doses of cocaine, I should here state:

1. That none of the injections cause any local inconvenience, either irritation, inflammation of the skin or abscess. From numerous insertions of the canula on the side and in front of his abdomen, not the slightest mark has remained; even recent insertions could hardly be traced.

2. A small zone of the integument, of which the punctured wound was the center, shows a noticeable reduction of sensibility.

3. The action of the cocaine invariably ensues within fifteen to twenty-five seconds; in less than half an hour it is at its height and within two hours it has almost entirely disappeared, when reaction gradually follows.

4. The cocaine obviously exercises its first effect upon the heart; the pulse, ordinarily, from 70 to 80 per minute, rises quickly to more than 120, but scarcely ever exceeds 130; it remains regular and shows no intermissions; it is of medium size, slightly hard, and continues in that condition and that quality for the first two hours following the application, when it gradually diminishes in frequency and returns to the ordinary standard. The patient insisted that intermissions had been frequently experienced by him, and that on locomotion the frequency would greatly augment. I was, however, unable to confirm these observations.

5. Among the earliest disagreeable symptoms of the patient is a burning sensation of the trunk and a cold and clammy perspiration of the extremities; the thermometer did not, however, reveal any tangible increase of animal heat, whereas the condition of the extremities were pronounced. The temperature of both the mouth and the axillary cavity showed rather a decrease, not exceeding one degree.

6. When the cocaine is in action, the skin appears dry and pallid, but the patient avers that a profuse perspiration would ensue as soon as he assumed a recumbent position; in the latter, the respiration becomes laborious, deep, sighing and yawning.

7. Whilst the moisture of the oral cavity remains undisturbed, the patient cemplains of a sensation of dryness and difficult deglutition; at one time the movements of the pharyngeal muscles were as painful as inflammation of the tonsils, but a new injection of cocaine removed the symptoms promptly.

8. Whilst under the influeuce, the patient is devoid of thirst, and would rather object to drinking any liquid, on account of the disagreeable sensation it invariably produces.

9. Cocaine destroys the appetite completely during its action, and gives rise to aversion for food, but the appetite returns when the effects have passed off.

10. It induces constipation, or intensifies the pre-existing sluggish condition of the bowels; the latter may continue for a week and longer, and may require repeated large doses of drastic medicine, whereas in ordinary conditions, a seidlitz powder would answer to move the bowels. At one time four cathartic pills induced diarrhea with painful tenesmus, and a new dose of cocaine promptly subdued both.

11. The secretion of urine ceased almost entirely for the time being, but returns when the patient comes out of its influence.

12. The sexual functions are likewise suspended to complete impotency during the action of the cocaine; their vigor returns, however, with rather increased appetite and endurance.

13. The senses manifest exaggerated susceptibilities; the patient experiences a ringing in the ears as from quinine when large doses have been employed, sounds become intensified, as in hydrophobia, without being painful, as in inflammation of the middle ear. Light effects the optic nerves to a degree of intolerance; illusions happen, distorting objects; even hallucinations occur, without fear or apprehension; the skin assumes a degree of sensibility so as to perceive an ordinary draught of air with the force of a blowing storm. These phenomena relating to the senses are, however, exceptional, and only happen under the action of very large doses.

A common effect upon the eye-balls is their prominence and brilliancy, connected with the dilatation of both pupils; more so, however, in the left. This effect developes very gradually, appearing toward the end of the action, but extends into the intermissions of succeeding doses.

14. Large doses of cocaine give rise to loquacity, notwithstanding that the patient

avers difficulty of speech, for reasons already mentioned; his conversation is, however, clear, connected, and congruous with the subject concerned. Most remarkable is the fine memory, the remembrance of dates, names and events. I have observed no aberration of the mind at all; it seems to me that the intellectual operations are in no way interfered with.

15. A few times, whilst the patient was under excessive influence of cocaine, he complained about severe pains in his limbs, "electric shocks" as he expressed it; along the brachial plexus, sciatic and crural nerves, although they seemed not to interfere with active or rapid locomotion; however, they were increased by touch. For the last fortnight these symptoms have not yet recurred.

16. Most remarkable is the decided aversion for alcoholic liquors observed ever since the patient commenced to use cocaine in large and excessive doses.

These are the phenomena elicited by my repeated observations on the patient within a month's time.

I cannot say how far the peculiar nervous irritability of my patient affects the varied sensations and symptoms which he describes. I am convinced that exaggeration and misrepresentation are not intended. He assures me of his sole purpose of serving science and mankind by disclosing the effects of cocaine upon him, as a warning to the profession and his fellow-beings, for he considers his cocaine habit a misfortune and misery from which he would like to shield others. The patient has just attained the age of thirty-eight years. He is above middle size, very active, and moves with vigor and endurance; nevertheless he looks pale and haggard, and has lost nearly twenty pounds of his weight, which, however, he will not attribute alone to the action of cocaine, from 156 pounds of weight he possessed several years ago, and at a period of abstinence. The question naturally arises, to what extent his constitution has been damaged by the excess of cocaine. During the last three years and six months I have frequently met the patient, and comparing his former condition with the present, I cannot say that he has notably changed in either appearance or action. The cocaine habit is certainly most deplorable for a man of his intellect and social station of life, but it appears to me that the use of cocaine has injured him less than excessive alcoholism unfailingly would have done in the same time. I have observed none of those organic disturbances in the system of my patient which are so prominent from the abuse of ardent liquors.

By comparison, therefore, the former is preferable to the latter.

Ever since my attention has been directed to the subject, I have had occasion to experiment with cocaine in various nervous affections; among others I have used it with decided relief in hyperesthesia of the uterus with marked effect by application to the cervix of that organ. I am now trying it with several patients who are addicted to alcohol like the former, but I have not as yet arrived at a positive conclusion. In a case of hysteria and copious hemorrhage from the bowels followed by collapse, the patient was promptly relieved by a hypodermic injection of this remedy. In a case of sciatica, a few injections of about the tenth part of a grain of cocaine decidedly alleviated the intense pain for hours; the treatment is still being continued.

I hope this contribution will induce further experiments by the profession, and thus elicit the interest which this remarkable preparation seems to deserve.

519 Pine St., St. Louis.

SOCIETY PROCEEDINGS.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

REPORTED FOR THE REVIEW BY WM. R. MORRISON, M. D., PHILADELPHIA, PA.

[CONCLUDED.]

WEDNESDAY. EVENING SESSION.

RELATIONS OF LUPUS VULGARIS TO TUBERCULOSIS, BY DR. J. N. HYDE, CHICAGO.

The speaker began with a detailed statement of all the cases of lupus reported to the statistical committee of the American Dermatological Association during the last seven years, and compared the frequency of the disease in this country with that reported in the Vienna hospitals. He then gave details of twenty consecutive cases observed by him in Chicago.

The clinical deductions from these records were then added, showing according to the author that there was a remarkable absence of pulmonary tuberculosis, scrofula and allied diseases in the family histories of the last twenty cases reported.

The teachings of the two schools, represented in the past by prominent German and

French authors, were then referred to, and finally the later investigations demonstrating that lupus vulgaris was the result of bacillus infection, not to be differentiated in external appearance of the parasite from the bacillus tuberculosis.

The following clinical facts were then cited in support of the later teaching of this subject as bearing on the vital point in the author's argument, viz: that lupus vulgaris was not the result, as had long been taught, of tuberculosis or other systematic diathesis, but was the product of a local infection by bacilli, entirely unassociated with any constitutional evidence of diathesis or predisposition. 1st. The unimpeachable character of the family record in by far the largest number of cases of lupus vulgaris. 2d. The fact that the disease is in its inception a disorder of the period of childhood, when for the most part, the habits of the child are favorable to infection. 3d. The several sites of predilection are the most favorable to such infection. 4th. The failure of the disease to spread by inheritance. 5th. The remarkable tendency of lupus vulgaris to cutaneous limitation.

The Treatment of Lupus by Parasiticides, by Dr. J. C. White, Boston.

The doctor reviewed briefly the evidence in favor of the parasitic nature of the affection. All previous plans of treatment which had proven successful were those which would have the effect of destroying any parasite which might be present.

A number of cases were then reported in which the local use of corrosive sublimate in the strength of two grains to the ounce of water or unguent had been used with beneficial results. The ointment was especially recommended, it had been rarely necessary to prolong treatment over two months. As regards permanency of the cure the author was unable to speak, as the experiments had been continued for only eighteen months.

Dr. Sherwell.—I would express my profound disbelief in the parasitic nature of the disease, and I do not know that the theories of Koch have been entirely proved.

Dr. Wigglesworth.—I would suggest that the oleates might be more efficient than ointments, on account of their penetrating power.

Dr. Hyde.—At the last meeting of the Association, Dr. Taylor suggested the use of a solution of corrosive sublimate in tincture of benzoine. I have used this in cases of lupus and in cases of infecting chancre. It makes an excellent application.

The next paper was by the President, Dr. W. A. Hardaway, St. Louis, on

The Treatment of Port-Wine Makk by Electrolysis.

In the treatment of this affection the object is to excite sufficient inflammation to cause occlusion of the vessels. Electrolysis seems to be the most convenient way of doing this. At first the speaker had used a bundle of needles, but he now employed only the single needle. It is important to allow a period of some weeks to elapse between the applications. The histories of three cases were given in which this method had been employed.

Discussion.

Dr. Wigglesworth.—I have seen good results from cutting the vessel in two places and using a preparation of iron, thus closing up the dilated vessels.

Dr. Fox.—I think that better results can be obtained by electrolysis than by other measures, but it does not remove the trouble entirely.

Dr. Hardaway.—The advantage of the electrolysis is that it is manageable. A practical point might be referred to, and that is if after the operation the part be frequently mopped with hot water, the inflammatory disturbance will be greatly lessened.

Remarks on a Moot Point in the Etiology of Psoriasis, by Dr, W. Sherwell, Brooklyn.

The speaker had been struck by the great diversity of opinion in regard to the general health of those affected with psoriasis; and, in order to arrive at something like a consensus of opinion on the subject, he had referred to the writings of most of the authorities in dermatological matters. Brief extracts from various writers were then given. The evidence thus obtained strengthened the doctor's opinion that the patients with psoriasis were generally in good health.

He thought that the theory of Piffard, who believes that the rheumatic diathesis is a great exciting cause of psoriasis, was the most rational theory that had been advanced.

Adjournment of evening session.

Thursday. Morning Session.

At the business meeting officers were elected as follows:

President, Dr. E. Wigglesworth, Boston, Mass.

Vice-presidents, Dr. I. E. Atkinson, Baltimore, Md., and Dr. A. R. Robinson, New York, N. Y.

Secretary, Dr. G. H. Tilden, Boston, Mass.

Treasurer, H. W. Stelwagon, Philadelphia, Penn.

Dr. E. B. Bronson, of New York, was elected to membership.

The next meeting will be held, beginning the last Wednesday of August, 1886, at Indian Harbor Hotel, Greenwich, Ct.

Dr. G. H. Fox gave a brief description of two cases of Dysidrosis.

The first patient, for want of a better term, he classed under this heading. The patient was twenty-nine years of age and had always perspired freely. Four years ago the eruption began on the palms of the hand and had persisted. The soles of the feet had also been affected at one time. The skin of the hands was decidedly thick and had a dark hue, and was dotted with numerous elevations of epidermis, averaging in size that of a hemp seed. The patient had never seen any moisture in connection with this. There had been no itching. The skin never peeled off. Puncture with a needle revealed no serum or fluid of any kind.

The second case was that of a woman aged forty-five, a cook, whose general health was good. The present trouble began five years ago. The eruption is on the face and consists of numerous large and small vesicles containing clear fluid.

DISCUSSION.

Dr. Robinson.—These latter cases are not infrequent and may persist for months and years. They consist in obstruction of the sweat duct in the corium. They never cause inflammation around them, although sometimes they may be surrounded by a little areola as the result of pressure. The symptoms which they present do not at all correspond to those of dysidrosis as described by Hutchinson and Tilbury Fox, as belonging to dysidrosis of the palms.

Micrological Studies in Tinea Favosa and Tinea Trichophytina, by Dr. A. R. Robinson, N. Y.

The speaker prefaced his paper with a few general remarks. The epidermis of different individuals differs in susceptibility to these parasites. Children are more apt to suffer with tinea trichophytina and favus, while adults more frequently presented tinea versicolor. All children are not equally susceptible. In many cases of parasitic disease there is impaired vitality previous to the development of the affection.

The speaker then gave an account of his investigations to determine the exact anatomical seat of the parasitic diseases in question and to determine the changes which they produced in surrounding tissues. The conclusion was that in favus the rete is not affected until the later stages when ulceration had made its appearance. The parasite confines itself more particulary to the corneous layer. The parasite of tinea trichophytina in some cases passes down into the rete, while in others it does not.

A number of sections were shown under the microscope which illustrated the points brought out in the paper.

DISCUSSION.

Dr. White.—I can not agree with the speaker in the importance of depressed general health as a factor in the production of these diseases. I have never seen any necessity for internal treatment in these cases. Where the disease affects a superficial portion of the body it is readily removed, but where it involves a portion covered with hair it is difficult to cure. Although I think the improvement of the general condition has nothing to do with the cure of the parasitic trouble, yet it is of service in the restoration of the parts to their natural condition after the parasite has been destroyed.

Dr. Piffard.—I must agree with Dr. Robinson that there is a relation between the condition of the general system and the rapidity of development and rapidity of cure.

Dr. Duhring.—I have always held the view that an articular condition of the epidermis was necessary for the growth of the fungous. The majority of cases of obstinate ring worm that I have seen, have been in individuals in poor health, but there are exceptions to this rule. What this peculiar condition of the skin is, has not been determined.

Dr. Heitzman.—As regards the constitution of the patient, I must agree with Dr. White. I have seen strong healthy persons covered from head to foot with tinea.

Dr. Denslow.—I have recently seen a large number of cases of ringworm of the head and beard, but all the patients were well developed muscular subjects. These were cured without internal treatment.

On the Structure of the Derma and the Development of Elastic Tissue in it, by C. Heitzman, New York.

The essayist drew attention to the fact that Professor Stricker of Vienna, the acknowledged best microscopist of Europe, has now accepted his views concerning the life of basis-substance. Dr. Gartner (who was present at the meeting), Stricker's assistant, has brought from Europe an electric picture microscope, by means of which these newly

discovered facts can easily be demonstrated to a large audience upon a screen. There are three varieties of basis structure, differing from each other in their chemical constituents, viz., the glue-yielding basis substance proper, producing the spindles within the bundles of so-called fibrous connective tissue; the cement substance between the spindles, and the elastic substance developing along the edge of the bundles in advancing age and in some tumors. All three varieties are traversed by a delicate reticulum of living matter in connection with the protoplasmic cords that fill the interstices between the bundles in the shape of a comparatively coarse reticulum. Thus it becomes intelligible that in morbid processes, not only the protoplasm, but also the basis substance, participates in an active manner. After the liquefaction of the solid fields of glue yielding basis substance, the bundles directly are transformed into inflammatory corpuscles from which starts every physiogical and pathological new formation.

Dr. W. A. Hardaway Described a Case of Multiple Myomata oe the Skin Accompanied With Severe Pain.

A. B., aet thirty-six, married with healthy children and good family history. Never had syphilis. Present trouble began a year ago. Changes in weather produced pains in the parts which have since become affected. To relieve these firm pressure was made with the hand. Between the paroxysms, pain was not produced by pressure. Later the lesions presented themselves.

Present condition. A strong hearty man, a peddler by occupation. The pains still persist, recurring at intervals of one night to a week. Each attack lasts two or three minutes and does not return the same night.

The growth is situated on the right side of the back in the midorsal region and the course of the growth is obliquely outwards. There are one or two of the elevations on the left side; three of the growths are as large as peas, others are small. The epidermis is not abnormal. On passing the hand over these growths, there is no hyperesthesia, but on deep pressure in the neighborhood of the larger masses, the patient sinks moaning to the floor.

One of the larger growths was removed and microscopical examination showed it to be composed of smooth muscular fibre.

From a clinical stand-point, the case bears a close relation to the cases of neuroma which have been reported. The speaker concluded that certain new growths in the skin accompanied with severe pain may be widely different histological structures. We are not justified in assuming that a painful tumor of the skin is a neuroma or fibroneuroma simply from its clinical history, without a microscopical examination.

Dr. Duhring.—It would be difficult to differentiate from the local appearances the case described by Dr. Hardaway and that which I reported some years ago. It is not possible from a clinical stand-point, as has been said, to differentiate these growths and have to rely on the microscope. There is one point, and that is in the case just described, no pain was produced by superficial manipulation, while in my case the pain was intense on the slightest touch, while firm pressure decreased the pain.

An Unusual Case of Tylosis of the Hands, by Dr. R. B. Morrison, Baltimore.

The patient was a negro, aged thirty-two, muscular, well developed and apparently healthy. By occupation he was a fireman of a steamer and had occupied this position for ten years, shoveling coal with the right hand, grasping the upper portion of the shovel, and the left hand sliding up and down the handle. Two fingers of the left hand are worn off to the second joint, while the other two are going in the same way, the nails having nearly disappeared. On several occasions he has drawn pieces of bone from the fingers. There has been no pain at all connected with the affection. On this hand there are some large blisters, underneath which there are red granulating surfaces, which are painless. There is no history nor evidence of syphilis. Specific treatment has been used without effect. The man obstinately refused to give up his work, so that little could be done in the way of treatment.

Dr. Tilden.—There is a good deal of resemblance between this case and the cases of perforating ulcer of the foot. And this would lead us to suspect a nervous element.

Dr. Morrison.—I am led to consider it a strictly local affection from the fact that the hand which was most exposed to rubbing and to the heat of the furnace was the one most affected.

Dr. Duhring.—I should be inclined to consider the callosities a secondary condition. The occupation probably had something to do with the aggravation of the disease. But if the occupation had been different, there would probably have been a similar change. I should regard it as dependent on some deep change in connection with the nerves similar

to what occurs in perforating ulcer of the foot.

Dr. Morrison.—That it was an affection of the nerve in the first place I can hardly admit. It may be that the continued congestion of the skin, dependent on his occupation, produced changes in the nerves or other part, which culminated in this affection. In referring to the literature of the subject, I find similar cases attributed to mechanical irritation.

Adjourned.

EVENING SESSION.

The Relations of Herpes Gestationis and Certain Other Forms of Disease to Dermatitis Herpetiformis, by Louis A. Duhring, M. D., Philadelphia.

Attention was briefly directed to the previous articles of the reader on dermatitis herpetiformis and to a paper showing its identity with the impetigo herpetiformis of Hebra; also to a preliminary note on the relation of this disease to herpes gestationis and other similar forms of cutaneous disease, read before the Association at the last meeting.

The object of the present communication was to prove the identity of so-called herpes gestationis with vesicular variety of dermatitis herpetiformis and to show that the term herpes gestationis was a misnomer, the affection being found in men as well as in women. Secondly, that certain other so-called forms of herpes such as "herpes pemphigus," "herpes vegetans," "herpes pyarmicus," &c., as well as certain cases regarded by the reporters as "peculiar forms of pemphigus," must be viewed as examples of this disease; and finally, that instances of the same affection were also met with in literature under the title of hydroa and under divers other captions. Numerous cases from English, French and German literature were cited. The paper of Dr. Duhring was stated to be looked upon as supplementary to the preliminary note referred to and embodied the results of considerable research into literature. If the views put forth proved to be correct, a great deal had been gained for dermatology in bringing these peculiar forms of disease together.

DISCUSSION.

Dr. Fox.—I wish to show here a photograph of a case which might be mistaken for dermatitis herpetiformis, namely, erythema multiformis. This disease should be placed in strong contrast with dermatitis herpetiformis.

Mycosis Fongoide, by Dr. G. H. Tilden, Boston, Massachusetts.

The speaker described the case of a man, aged twenty-eight years when he came under observation. Three years before, several red, desquamating spots had been observed on the elbows. Several months later erythematous spots accompanied with pruritis were not so. These lesions retained a dry scaly character. There were no vesicles or pustules. At the end of a year, several red nodules appeared on the face and throat. These, however, disappeared. Later a small papule appeared on the right thigh and increased in size. From this there exuded a thin fluid. This was followed by the development in many parts of the body, particularly the axilla, groins and neck, of similar lesions in some cases reaching the size of a hen's egg. After a time there was superficial erosion of some of the tumors, but these excoriated tumors remained firm in consistence. But some of the masses which were covered with epidermis were soft, but there was no evidence of the formation of pus. There was also indolent enlargement of the lymphatic glands. The general health continued good. The patient passed from observation and died at the end of three years and a half.

The report of the microscopist who examined the tumors was read. His opinion was that the growths consisted of the formation of lymph tissue in corium.

Reference was then made to the literature of the subject and the various cases, some thirty in number, which had been reported were given and the symptoms and course of the disease was described.

Dr. White.—The patient was under my care during the last stages of the disease and he presented the changes which have been described. Some of the larger growths disappeared. During the last months of his life the man was taking arsenic. Death resulted from the occurrence of diarrhea.

Dr. Rohe.—Four years ago I saw a case of what I think to have been the same affection. The man, sixty-two years of age, had a multitude of these tumors. Several had been extirpated before he came under my care, but there was recurrence with this fungoid appearance. The man was given arsenic, but he died from exhaustion. No autopsy could be obtained. As far as could be detected, there was no affection of the liver or spleen.

Dr. Morrison.—I have seen a similar case which was diagnosed multiple sarcoma of the

skin. It takes the microscope to settle the question in these cases.

Dr. Fox.—We have seen one or two similar cases in New York. Should one come under my care, I should try the effect of calamooga oil. Judging from its effects in other cases, it should be useful.

Dr. Hardaway.—In a case of alveolar sarcoma, which I reported, the disease has existed fifteen years, but the clinical features are about the same as they were years ago. There is marked enlargement of the lymphatic glands. The general condition is good.

Dr. Heitzman.—The description of the microscopic appearance is that of lympho-sarcoma and the examination of the specimen confirms me in the view that this was a case of lympho-sarcoma.

Dr. Sherwell.—To show the amount of involution that may take place, I would refer to a case of melano-sarcoma under my care. The man was treated with arsenic, mercurials and so forth. After six months' treatment, the tumors have almost entirely disappeared. There was not the slightest evidence of syphilis.

Dr. Fox.—In regard to the use of calamooga oil, I have seen it used in a case of leprosy. There is now not a trace of leprosy, except the contraction of the fingers, which is, however, a secondary condition. It has failed in many cases, but there is sufficient to justify a trial of it in the chronic inflammatory affections referred to to-night.

Urethral Irritation in the Male as a Cause of Certain Neurosis and of Acne, Dr. L. N. Denslow, St. Paul, Minnesota.

He prefaced his remarks by a brief review of the cases of contracted meatus reported by Dr. Otis. He then gave an account of a number of cases coming under his observation in which there were reflex conditions associated with conditions of the urethra, such as contracted meatus, stricture and excessive sensitiveness of the prostatic urethra. In these cases removal of the urethral trouble produced an alleviation or cure of the affection to which attention had been directed. He also reported four cases of severe acne in which the same treatment had been followed by marked improvement or cure of the skin disease. In some of the cases ergotin was also employed. The speaker said that he simply reports the cases as so many observed facts, and did not express any theory. He would keep the cases under observation and at a subsequent meeting give a further report.

Dr. Sherwell.—I believe that acne is largely a reflex disorder, but I am not in the habit of introducing a sound in every case of acne. I get good results from other measures. I think that it is valuable in severe cases. I strongly believe in the action of ergot in connection with local applications, especially in females.

Dr. Hyde.—Many of these cases with urethral trouble associated with acne are patients who probably have been taking for some time balsamic preparations, and as a result they have the development of acne. I would suggest to Dr. Denslow that he takes this point into consideration.

Dr. Denslow.—In all the cases reported the acne had existed since puberty. The patients were not hypochondriacs and they were not masturbators. I am satisfied that no drugs had been used in any of them.

Adjourned.

FRIDAY. THIRD DAY. MORNING SESSION.

Remarks on Electrolysis and Other Practical Topics, by Dr. C. Heitzman, New York.

The reader spoke very highly of electrolytic epilation. For this purpose he uses the Le-Blanche battery. Six cells of this battery has the advantage of steadiness, lack of pain and lack of reaction when applied to the face of patient. He employs a needle devised by Leiter, of Vienna, which permits the depth to which the needle penetrates to be measured.

He has had good results from electrolytic destruction of dilated blood vessels in the face, less satisfactory results in the treatment of port wine marks, where a permanent cure is only exceptionably attainable. Sodium ethyl is highly reccommended by some for the destruction of angioma of the face, but it is in no way superior to nitric acid.

The speaker maintained after observing too hundred cases of falling of the hair, caused by secorrhea, that the method he recommended in 1876 gave fair results. This is the application of a ten or twenty per cent, ointment of crude oleum rusci in vaseline and paraffin.

For the removal of freckles, the doctor used an ointment recommended to him by Wertheim of Vienna. The preparation is as follows:

℞ Hydrard. ammon. muriat.,	gr.	3.75
Magist. bismuth,	- -	3.5
Ungt. glycerina,	- -	30.0

M.

This is to be applied in a thin layer, every other night, and in four or six weeks the re-

sult is highly satisfactory. As to the permanency of the cure the doctor was unable to state.

In regard to the reappearance of hair after removal by electrolysis, the speaker considered it to be due to the growth of the fine hairs which was increased by the transference to them of the nutrition which should have gone to the hairs removed.

Dr. Hyde.—Dr. Heitzman has touched upon the important point in the removal of hair by electrolysis. The question is not what will the result be at present, but what will it be in the future. The electrolysis produces a hyperaemia which tends to stimulate the growth of the remaining hair. I have found the rectified oleum rusci very valuable.

Dr. Fox.—In regard to the treatment of angioma, I have used nitric acid, making the application in the form of small dots one-fourth to half an inch apart with great advantage. In one case in which a naeus occupied half the body I used this treatment with much success.

In regard to the return of the hair after electrolysis: If the needle is carefully inserted and gentle traction is made on the hair, that hair will not return. In some cases there is a constant increase in the downy hairs from some cause, but these are exceptional cases. I do not think that the removal of hairs increases the growth of others. In one case, that of a young woman with a strong beard, I removed by actual count eight thousand hairs. This process required two or three years. Since then it has been necessary to remove only a few dozen hiars.

Dr. Robinson.—I have used a similar ointment for the removal of freckles, but its effect is only temporary. I think that the growth of the remaining hairs is increased by the removal of a portion.

Dr. Wigglesworth. For the past fifteen years I have used the following ointment, which is almost identical with that mentioned by Dr. Heitzman.

R.	Hydrarg. Ammon.,	parts	10
	Bismuth Subnitratis	"	10
	Vaseline,	"	100 M.

Dr. Duhring. I consider the oil of rusci valuable in seborrhea of the scalp. The objection to it is its disagreeable odor. I have also used in chronic seborrhea of the scalp a preparation of sulphur, but I do not consider it as efficacious as tar

Dr. Hardaway.—I have performed the operation of electrolysis for ten or twelve years, probably longer than any other member of the association. I use the iridoplatinum needle, which has the advantage of being bent and it is not likely to pass through the follicle wall. The moment the follicle is entered, there is an escape of serum. One case, that of a woman with a heavy black beard, has been entirely relieved. Electrolysis with a fine needle affords a method of getting rid of freckles. The plan is to dot the needle over the surface covered by the freckle.

Dr. Heitzman.—The percentage of recurring hairs is greater in some situations than in others. In the submaxillary region, it is greatest. The oil of rusci crudum is better than the rectified oil.

On Syphilitic Re-Infection.

By R. W. Taylor, New York.—The speaker first referred to the literature of the subject and gave a brief review of the authentic cases on record, giving the names of the reporters. The number of cases previously reported is between thirty and forty. To these the speaker added the histories of three more. A fourth case has been observed by him, but as the complete history was not prepared it was not given.

Case. I—A barkeeper, aged 25 years. Was first seen in 1868 suffering with gonorrhoea. Three years previously had had indo lent enlargement of the lymphatic glands in the groins. Examination showed the presence of lymphatic enlargement in certain regions. Inquiry into the history showed the existence of a chancre three years before which had been slow in healing. About two months later, he became sick and suffered with a roseolous eruption, sore throat, falling of the hair and rheumatic pains, worse at night. Under treatment he improved, but afterwards exhibited a papular eruption. He was then seen by Dr. Van Buren, who pronounced the case one of syphilis and ordered mercurial treatment. He recovered after two years, but of his own accord continued the treatment two years longer. He then remained well until the attack of gonorrhoea.

In Feb. 1870, he again appeared, presenting a typical indurated chancre on the cutaneougs aspect of the pubes. It presented every evidence of a primary infection. Later a papular syphilide appeared over the body. There were several mucous patches on the pillars of the fauces and the throat was red and swollen. The joints soon became the seat of nocturnal pains. The patient also presented a form of syphilitic epididymitis. Under mercurial treatment, there was some improvement, but a year later there were some tertiary manifestations. By 1874, he seemed very well. During the next three years, there were no

evidences of syphilis, but he continued the mixed treatment.

He was again seen in the fall of 1882, when it was learned that his good health had continued and that he was the father of a healthy child. The child was examined and no evidence of hereditary syphilis detected.

Case II.—Had in June, 1873, a typical indurated chancre, followed by distinct secondary symptoms, which disappeared under treatment. He then passed from observation. In Feb. 1874, he presented several ulcero-tubercular lesions on the outer aspect of the forearm. He then remained under treatment six months. In January, 1875, he had spots of thickening of the periosteum of both tibia. He was again treated with benefit. In June, 1876, there was a typical indurated nodule on the prepuce, from which extended indurated lyphatics extended to the inguinal lymphatic glands. The incubation of this sore had been about twenty days. This was followed by malaise, sore throat, swelling of the post cervical and epitoochlear glands. Over the body and arms there was a fine mottling of light pink color. The patient then went to Europe and was not seen until March, 1885, when it was learned that the symptoms had been well marked and that he had been under treatment for them with several continental physicians.

Case III.—Age 41, had had a typical indurated chancre in 1874. There had been inguinal adenitis, followed by roseola, falling of the hair and later by severe iritis of the right side. He was treated with mercury.

In Feb. 1882, he returned with a typical hard chancre. In April, he became sick, had rheumatic pains and a mixed eruption of erythematous and papular syphilide. In May, inflammation of the iris of the right eye again appeared. In 1883, he had a late secondary rash.

These cases were reported with the object of throwing some light upon the natural history of second infections of syphilis. In all these cases, relapsing indurations were carefully excluded.

Dr. Hyde.—In my experience, I have had but two cases of reinfection of syphilis, where I was perfectly sure of the fact.

Observations On The Oleates.

H. W. Stelwagon, M. D., Philadelphia—In regard to the chemistry and preparation of the various oleates, both as to their manufacture by the direct combination of the acid with the case and by double decomposition, almost, if not entirely, as much can be found in the English translation of Gmelin's handbook of chemistry, published 1866, as in the writings of the past several years.

Of all the oleates those of mercury, zinc, bismuth and lead have a place in the treatment of diseases of the skin, and in view of their costliness, the seeming unavoidable frequency of badly made preparations, the disagreeable oleic acid odor and the irritation so frequently observed following their use, it is probable that of these four the mercuric oleate is the only one that promises to retain a permanent value. This last is especially valuable in ringworm of the scalp, but for inunctions in the treatment of syphilis, it is of doubtful utility as it is questionable whether it is absorbed. Oleate of copper which has been so highly recommended for ringworm of the scalp, is not comparable in that affection to oleate of mercury or to tar and sulphur preparations.

Dr. Duhring.—My experience with these preparations is in accord with that of the reader of the paper. I have employed the oleate of copper in varying strengths in thirty or forty cases of ringworm, but it seemed to exert no influence whatever. These were however obstinate cases. Other methods of treatment were afterwards tried and they were finally cured. As to its efficiency in acuter forms of ringworm, I am not prepared to speak.

Dr. Heitzman.—I have tried the oleate of copper in chronic cases of ringworm, without any result, but in the acute cases, it cures after a time. It is not as efficient, however, as the preparation recommended by Dr. Taylor, that is four grains of bichloride of mercury to the ounce of tincture of myrrh.

Dr. Fox.—I should like to refer to the comparison between oleates and vaseline. It has been claimed that the oleic acid and animal oils are better absorbed than these other preparations. As a matter of experience, I have found that vaseline makes a better base for the majority of ointments than does the animal oils. I have also found vaseline a most soothing application to the skin.

Dr. Hardaway.—I have almost entirely discarded the oleates. In some recent cases, the oleate of copper has seemed to be successful, but in chronic cases it entirely failed.

A Case of Syphilitic Aphasia and Paraplegia, Followed by Death with an Account of the Autopsy.

Dr. L. N. Denslow, St. Paul, Minn—The object of the author was simply to put no record a case in which an autopsy was obtained in early syphilitic cephalgia. The patient was seen in consultation April 29,

1885. Two months previously the patient had begun to suffer with severe headache, worse at night. There was also a papular eruption. He acknowledges the existence of a sore six months previously. Iodide of potassium with chloral had been given two weeks later; the patient was free from pain, but it returned one month afterwards, when the patient stopped taking medicine. Iodide of potassium was again given with the effect of relieving the pain. Aphasia and paraplegia then developed and the patient died four days later, and within nine months of the initial lesion.

At the autopsy, the dura mater, along the superior longitudinal sinus, was thickened and adherent. There were numerous small gummata inthe-pia mater, situated along the right border of the longitudinal sinus and extended back to the fissure of sylvius. The pia mater exhibited the evidences of simple acute inflammation.

Adjourned.

BULLETIN OF THE NATIONAL BOARD OF HEALTH.

September 1, 1885.

Montreal, Canada, August 21.—During the three days August 20-22 inclusive 91 cases of small-pox were reported. From August 15 to 21 inclusive the deaths reported numbered 37. Cases reported August 1-22, 380; deaths August 1-21, 115.

Toronto, Ont., August 26.—One additional case of small-pox reported since the 22d. Every precaution is being taken by the health officer to prevent the spread of the disease.

NOTE.—On the 29th ult. a telegram from Dr. P. H. Bryce, Sec'y Pro. Board of Health Ontario, stating that at that date there were but two cases of small-pox in the entire province.

Havana, Cuba, August 19.—Thirty cases yellow fever and 3 deaths.

Matanzas, August 12.—One death from yellow fever.

Matanzas, August 19.—No yellow fever reported.

Cardenas, August 15.—Free from cholera or yellow fever.

Santiago de Cuba, August 8.—Yellow fever 6 cases, 3 deaths; typhus 4 cases, 2 deaths.

Nassau, W. I., August 15.—Free from epidemic diseases.

Acapulco, Mex., August 9.—Free from epidemic diseases.

Antwerp, Belg., August 15.—Small-pox 8 cases, 2 deaths.

Antwerp, Belg., August 8.—Small-pox 11 cases 4 deaths.

Valencia, August 15.—One hundred and thirty-eight cases and 50 deaths from cholera.

Gibraltar, August 9.—One fatal case of cholera.

Malaga.—By cable August 27: Cholera officially declared at Almeria; since August 24, 60 deaths daily. None in Malaga.

Genoa, Italy, August 19.—One case small-pox—fatal.

Munich, Bavaria, August 8.—One death from small-pox.

Trieste, Austria, August 8.—Two cases small-pox, 1 death.

St. Petersburg, Russia, August 1.—One death from small-pox.

Warsaw, Russia, August 8.—Four deaths from small-pox.

Calcutta, India, July 11.—Twenty-two deaths from cholera.

We give in the following table the number of cases and deaths from cholera in Spain from July 17, the date of our last report, to July 30:

PROVINCE.	Cases.	Deaths.	Per ct. Mortality
Albacete	791	255	32.2
Alicante	2945	1403	47.6
Badajoz	605	233	38.5
Castellon	2419	959	39.7
Cuenca	1020	498	48.8
Granada	857	414	48.3
Jaen	790	375	47.6
Murcia	2438	1046	42.9
Segovia	186	79	42.4
Soria	538	255	47.4
Tarragona	1341	364	27.1
Teruel	2666	679	25.5
Toledo	1823	699	38.4
Valencia	5676	2639	46.5
Zamora	151	30	19.9
Zaragoza	7464	2812	39
Madrid	704	315	44.7
TOTAL	32414	13055	
Prev'ly Rept'd	48941	21846	
Total Rept'd	81355	34901	

W. P. DUNWOODY, Sec'y.

—It is reported that Ferran gets about $2.50 for each "preventive" inoculation.

—Vigier recommends, as a face wash, one part boracic acid in one-hundred parts of rosewater; pimples, boils, etc., are said to be much improved by application night and morning.

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PARANEPHRITIC ABSCESSES.

This is the title of 253 of "Volkmann's Sammlung klinischer Vortraege," and embodies a careful collation of facts relating to the pathology and therapeutics of those extra-peritoneal suppurations that develop around and about the kidney, and are ordinarily styled paranephritic abscesses. H. Fischer is the author. Careful study of the literature of the subject and extensive personal observation contribute to make the pamphlet valuable.

Paranephritis is met with more frequently in the male than in the female, and develops especially about poorly developed or malformed kidneys. A primary and a secondary form is to be distinguished.

As etiological factors of the primary form, Fischer indicates contusion of the renal region, rheumatic influence, traumatism, acute infectious disease and septic processes; also actinomycosis of the pararenal structures.

The second form of paranephritis comprise such that develop, first, from the kidneys themselves; second, from neighboring organs.

The first class may develop in consequence of pyelo-nephritis in connection with calculi or gonorrheal infection, or as a sequel of purulent nephritis, or from a suppurative disintegration of renal tumors.

To the second subdivision belong suppurations of more or less remote organs, that burrow and present themselves in the renal region. Empyema of the thorax, abscess of the liver, suppuration and gangrene of the intestines, purulent circumscript peritonitis, perityphlitis, caries of the vertebrae, ribs or pelvis, actinomycosis of the vertebrae or the intestines, phlegmonous pelvic cellulitis, phlegmonous inflammation after operations about the rectum, the bladder or testicles are some of the possible causes.

Fischer goes into the detail of the symptomology and the points of differential diagnosis in all these given cases. He cites an experience of his own in which a suppurating hematoma in the region of the kidney brought about retention of urine and all the signs of ileus by compression of the colon. The abscess finally discharged into the colon and, after a retention of stool for ten days, prompt recovery ensued.

As to the ultimate fate of these suppurations, that are so heterogenous in their origin, Fischer says that in a few cases simple resorption may take place. It appears that a breaking of the abscess through the thick muscular and fascial layers of the lumbar region is not of frequent occurrence. The pus may empty into the pelvis of the kidney and thence find its way into the bladder; perforation into the peritoneal or pleural cavity, and in the latter case discharge through the lung, is a known occurrence; rupture into the colon is frequent. Or the abscess may burrow along the psoas muscle and the fossa iliaca and present at the hip joint or thigh.

Death ensues through suppuration, or from some of the given complications, or pyemia and urosepsis.

The author thereupon digresses at length upon renal surgery in general, and speaks of his own experience in nephro-lithiasis, pyelonephritis, uroseptic suppuration, tuberculosis, traumatism and malignant tumors of the kidneys.

In cases of renal calculus Fischer thinks that nephrolithotomy should be executed if the patient is running down from hemorrhage, violent colic or suppurative pyelitis.

He admonishes against removal of the kidney in such cases, because the calculous disease frequently implicates both organs.

Given a case of pyelonephritis purulenta, the correct plan to pursue is nephrotomy; the wound is to be packed and dressed with tampons of iodoform, and a clear idea as to the condition of the opposite kidney first ascertained. Then at a second operation excision may be practiced, should the features of the case demand it.

In cases of uroseptic suppuration and tuberculosis, Fischer rejects excision on account of the usual implication of both kidneys. In malignant disease, however, removal is always demanded, and Fischer gives the intraperitoneal method the preference.

These remarks of the author define his attitude in relation to those cases of secondary paranephritis purulenta that arise from renal mischief. In cases that imperatively demand nephrectomy the operation ought to be done in two stages. The pararenal abscess is to be laid open first, and excision may follow.

The treatment of burrowing abscesses is discussed and the surgical principles usual in such cases are adhered to.

Treatment of Nightsweats.

In the Gazette Médical de Paris we find two suggestions as to the relief of phthisical and other nightsweats. They are both simple enough and certainly merit a trial.

In the first procedure it is directed that the trunk be sponged or rubbed with a mixture of four parts of tincture of belladonna to thirty parts of water. The lotion is best applied by pouring it into the hollow of the hand and bathing the body an hour or two before the expected sweating.

In fifty cases cited but one failure to suppress the perspiration is recorded.

The second method consists in sponging the body of the patient with a solution of eight grams of chloral hydrate in one goblet each of water and whiskey. If the sponging alone does not suffice the patient should wear a shirt that has been dipped in the solution and then dried at a moderate heat. In the non-phthisical nightsweat of children this device is said to yield excellent results.

Capsicum Annuum in Delirium Tremens.

Dulácska reports in the Pester Medicin-Chirurg. Presse on four cases of delirium tremens treated with capsicum annum. One of the cases was complicated with pneumonia, a second by extreme motor and psychical restlessness. The result in all the cases was more prompt than after giving chloral. Two grams of the powder were given every hour; after the fourth dose sleep came on, together with profuse sweating, voidance of urine and diarrhea.

The mode of action is surmised by Dulácska to consist in a reflex action of the intestinal irritation upon the pneumogastric, resulting in slowing of the heart's action. The venous circulation becomes more tardy and the consequence is sleep and profuse secretion of urine.

Prolongation of the Anesthetic Effects of Cocaine.

Dr. J. Leonard Corning contributes a paper to the New York Medical Journal which is of practical applicability. He summarizes his work in the following words, which readily explain his methods and aims:

1. Experiment goes to show that simple arrest of the circulation in the part, shortly after injection of the anesthetic, is sufficient to prolong and intensify the anethesia.

2. Experiment shows that, if the injection is made after exsanguination and compression, there is little diffusion of the anesthetic, and, consequently, a commensurate diminution in the number of nerve-filaments exposed to the influence of the solution. It is true, however, as we have seen, that by the aid of massage some purely mechanical diffusion may be produced.

3. Experiment seems to prove that, if the injection is made a few moments before ex-

sanguination and the application of the tourniquet, a sufficient amount of saturation of the tissue is obtained to expose a large number of nerve-filaments to the influence of the anesthetic; and yet, unless we wait too long, there is no danger of diluting or dissipating the solution (by the access of too much blood) to such a degree as to weaken or nullify the anesthetic influence.

The essential advantages of this method of local anesthetization consist in our ability to expose the nerve-filaments for any length of time to the influence of the anesthetic. We are thus practically able to prolong the anesthesia to an indefinite degree. We are furthermore enabled to do this by the use of comparatively small quantities of cocaine, repeated injections being unnecessary to prolong the anesthesia, as is necessary when the circulation is not arrested. There is, consequently, no danger of constitutional disturbances from overdosing.

It is clear that this method may be applied in the surgery of all the extremities; and in the treatment of neuralgias and other disorders of the peripheral nervous system it is, I believe, destined to render good service.

Cocaine in Hay Fever.—Dr. G. H. Simmons, of Lincoln, Neb., writes to the Medical Record that he has used cocaine for the relief of hay fever with marked success in several instances. He relates the following case: "A farmer came into my office about three weeks ago, and, in a discouraged manner, asked me if there was nothing I could give him to relieve him of that terrible suffering and annoyance. His eyes were bloodshot, and his looks showed that he suffered all that he claimed to. Every little while he would have an attack of sneezing, which lasted three or four minutes, after which there would be profuse perspiration. He complained of great shortness of breath, exhaustion, and dimness of sight. There was intense itching of the nares, frontal headache, and severe pain in the eyes. It was the eye trouble that suggested cocaine to my mind, and as I had only a few minutes before been using a two per cent solution in a case of cystitis (and with success), I without hesitancy concluded to try it in this case. I dropped two or three minims of the solution into each eye, and the effect was almost miraculous. I then with a camel-hair pencil applied a few drops to each nostril and well back into the posterior nares. The relief was immediate and complete. I gave my patient two drams of the solution and instructed him how to use it. I saw him again in ten days, and his praises in favor of the remedy were very profuse. He had used it about three times a day, and thus kept off all symptoms of his annual trouble. It was the first time he said for years that he had been free from it during the latter part of July and the first two or three weeks of August. A second case in which the same remedy was used was hardly as severe, but the relief was just as complete and satisfactory. The patient is a married lady who has never found relief before without going either to the lakes or the mountains. In this case I used a four per cent. solution." Dr. Simmons has also employed cocaine in a five per cent. solution in equal parts of vaseline and castor-oil, as recommended by Dr. Gelston, of Limerick. He was successful, but nevertheless prefers the simple aqueous solution. He notes that Mr. John Watson, of London, has obtained relief in his own case by the use of tablets of cocaine inserted into each nostril.

Ichthyol.—Of this substance, so far but little employed in this country, the Medical Record says:

"This is a bituminous substance, found in the Tyrol, and formed from the remains of antediluvian fishes. Its chemical constituents are carbon, hydrogen, oxygen, sulphur (ten to sixteen per cent), and phosphorus (0.5 per cent). It has the appearance of tar, is about of the consistence of vaseline, is slightly soluble in water, alcohol and ether, and is miscible in all proportions in oils and vaseline. Owing partly to its large percentage of sulphur it is found to be of value in the treatment of skin diseases, and especially of acne

rosacea. In the latter disease it is used externally and internally, and even sometimes hypodermatically. For internal use a solution is made of five to ten parts of ichthyol to twenty parts of distilled water, the dose of which is fifteen drops, gradually increased to fifty, twice a day in water. An ichthyol soap is also made, and recommended strongly by Unna (Volkmann's Klinische Vortræge, No. 252) in the treatment of acne. It is useful also in burns and other traumatic lesions of the skin. Lorenz (Deutsche Medicinische Wochenschrift, No. 23, 1885) has found it of value, externally applied, in relieving the pains of chronic articular rheumatism, using for this purpose an ointment of the strength of thirty per cent. Internally, ichthyol acts as an aperient, and has also been used with apparent benefit in gastritis in doses of two to three grains twice a day. The wide range of applicability of this medicament is to be explained by the property which it seems to possess in a remarkable degree of subduing inflammatory processes."

Kissing From a Medical Stand-Point.—The Journal of the American Medical Association writes:

"A correspondent in our valued contemporary Babyhood, of September, 1885, justly condems the custom, quite usual with some mothers, of compelling children to kiss people promiscuously. The sensibilities of children are very acute, and it is not surprising that they should often strenuously object to promiscuous osculatory exercises. It is enough to make even a young child lose all faith in human nature to be compelled to kiss some people. And apart from the physical objections to the habit there are moral objections to it. If the child objects it is a species of cruelty to compel it to kiss; and if it does not object, it may become so wedded to the habit as possibly to entail serious moral or physical consequences in after life.

We say physical consequences with good reason; for besides such a sore accident as rupture of the membrana tympani, which has resulted from a kiss on the ear, loathsome and deadly diseases may be communicated by kissing. Any one of the contagious or infectious diseases may be so communicated, and there are certainly numerous cases on record in which diphtheria and scarlatina have been traced very directly to a kiss. How is a mother to know but that the person who kisses her child has some specific affection, that there are specific buccal lesions, which may be the direct cause of a life-time of misery to her child, or an early and horrible death. From her stand-point, therefore, that compulsory kissing is disagreeable to the child, the correspondent of Babyhood is in the right, but, as we have shown, it is doubly wrong, in that it may, after the disagreeable act is finished and perhaps forgotten, entail the most serious consequences."

Milk Sickness.—In the course of an article entitled "A Review of Epidemics in Southeastern Indiana during the past fifty years," read by Dr. G. Sutton, of Aurora, Ind., at a meeting of the Indiana State Medical Society, April, 1885, and published in the Cincinnati Lancet and Clinic, the following passages occur relative to this strange condition:

"From 1836 to 1856 we occasionally had epidemics of a disease which was known in those days as milk sickness. This disease was confined to a section of Dearborn county between six and seven miles in length and three or four in breadth, extending from what is known as King's Ridge in a southerly direction to near Hartford. This was probably the most dry and elevated portion of Dearborn county, and that portion of the county most free from intermittent, remittent or malarial fevers. During these epidemics the cattle died in this locality with a disease known by the name of trembles. Some farmers lost nearly all their stock. This sickness and loss of cattle caused a depreciation in the value of the farms in this section of the county. The premonitory symptoms of this disease were a remarkable feeling of lassitude, loss of appetite, headache, coated tongue, and a burning sensation in the epi-

gastric region. After a variable period these symptoms were followed by nausea and frequent vomiting and a low grade of fever of a continuous type, and in all cases there was obstinate constipation. The fluid vomited was generally mucus tinged of a dark or greenish color. There was seldom a well-marked chill, neither was there a well-marked intermission in the fever. The fever was nearly always of a low grade. I am well aware that writers have regarded milk sickness as only a modification of our malarial fevers, but it appears to me that this disease must arise from some cause entirely different from the malaria that produces our intermittent fevers, for in Southeastern Indiana milk sickness occurred in that portion of the county where malarial diseases were not known, while along the vale of the Laughery, where malarial diseases were the most malignant, milk sickness never occurred and the cattle did not die with the trembles.

I diagnose milk sickness from malarial fevers as follows:

In milk sickness the attack is seldom accompanied with chills and the fever is generally continuous and of a low grade.	Malarial fevers are generally preceded by chills, and the fever is either of a remitting or intermitting character.
In milk sickness there is nausea and vomiting and obstinate constipation which is a prominent symptom in the disease.	In malarial diseases there may be nausea and vomiting, but obstinate constipation is not remarkable.
Milk sickness in most instances is confined to small circumscribed localities, frequently occurring in situations exempt from malarial diseases and is seen only in the Western States.	Malarial diseases are seen on low flat ground or along the water courses all over the United States and in different parts of the world.
Milk sickness generally makes its appearance during those seasons when cattle are attacked or are dying with the disease known as trembles.	Malarial diseases prevail where there are no remarkable diseases amongst the cattle and they seem to have no connection with epizootics.
In milk sickness small doses of castor oil, epsom salts, blisters over the stomach and enemas, are the remedies generally resorted to in the treatment of this disease, while quinine has but little effect.	In malarial diseases quinine is the specific. Sometimes aided by emetics and cathartics.

For the last twenty years I have not heard of a well marked case of milk sickness in this section of country where the disease was at one time so common, neither have I heard of cattle dying of the "trembles." The country has since been cleared, the ground cultivated, and milk sickness and the disease amongst the cattle known as trembles has entirely disappeared. The land which was once depreciated in value on account of these diseases is now ranked amongst the most valuable in Dearborn county. This is additional evidence that the removal of the forests in many localities, so far from being an evil, is conducive to health."

New Experimental and Clinical Researches upon Bright's Disease.—Prof. Mariano Semmola deduces the following conclusions (La Medicina Contemporanea, Louisville Medical News) from the results of his latest experimental and clinical researches upon Bright's disease:

1. Albumen can traverse the renal tissue without any previous alteration in the histological elements of the kidney, and without leaving any trace of its passage.

2. If the passage of albumen be persistent, the first effect is hyperemia with intraglomerular and intratubular hemorrhage, and the capsule is distended in a mass after boiling, and sometimes is simply raised and separated from the glomerulus by an empty space. There is also observed considerable migration of leucocytes without any alteration of the epithelium. The urine contains hyaline cylinders. These are the first results of an inflammatory action in relation with the functional activity of the kidney.

3. If the functional process persists beyond even eight or ten days, especially with the injection of albumen in the proportion of one gram for every thousand grams of the animal's weight, the invading process is attended by a mild inflammatory action, in addition to a turbid swelling of the epithelium of the tubules, fatty degeneration, and thickening of the intratubular connective tissue.

This proves that the functional activity

which the kidney must sustain in the gradual and prolonged elimination of unassimilable albumen, is apt to provoke successively in different parts of the organ an inflammatory process, which, commencing in simple hyperemia, may result finally in the establishment of interstitial nephritis. Prof. Semmola is convinced by repeating the experiments and injecting every minute quantities of albumen, in order to have the experiments well under control and preserve the life of the dog for seven or eight months, that they will result in producing the last phases of the large white kidney—that is to say, the atrophic kidney.

4. The histological alterations in the kidney persist for some time after the injection of the albumen without producing a continuation of the albuminuria.

5. Along with the elimination of albumen with the urine is also observed albuminocholia; that is to say, the elimination of a certain quantity of albumen with the bile.

In relation with the above experiments, Prof. Semmola proposes to continue his researches on the pathology of Bright's disease with the following experiments to determine:

1. The comparative influence upon renal elimination produced by the injection of albuminose, which is presumably more assimilable, such as serum of blood, albumino-peptones, white of egg and milk.

2. The influence of albuminous injections upon the crasis of the blood, and upon the elimination of a quantity of albumen greater than that injected.

3. The influence of albumen injections upon degree of activity in the combustion of nitrogenous matters and upon the production of urea.

4. The influence of albuminose injections upon the dycrasic condition of the blood, and their relations with the production of anasarca.

Typhoid Fever and the Water-Supply of Chicago.—The special correspondent of the Therapeutic Gazette, quoted by the Maryland Medical Journal, writes: Dr. Oscar C. De Wolf, Commissioner of Health, says that fifteen years ago typhoid fever was of infrequent occurrence in Chicago. On the other hand, all forms of acute and chronic malarial fevers were constantly and universally observed.

To-day, acute intermittent and remittent fevers are of comparatively infrequent occurrence, while the wards of many of the large hospitals are crowded with typhoid fever patients.

A possible explanation of this remarkable change may be found in the Chicago waterworks, a feature for which the town has established a reputation even rivaling that of the stock-yards.

Professor James Nevins Hyde, M. D., alluding to the prophylaxis of cholera in a recent editorial, says:

"The sacred singer of Israel once cried, in a burst of poetic imagery, 'Moab is my wash-pot!' Chicago might well echo with the refrain, 'Lake Michigan is my wash-pot, my drinking-cup, and my chamber-pot!'

"Her water-works are indeed great. They supply her with water from the lake fully and freely; in fact, as fully and as freely as she restores to it again the refuse of her corporate body. If there be any germ of disease in her excreta, any virus lurking in her animal refuse, she receives it again in part, after it has been thrown off.

"Not content with emptying her own ejects into the lake from which she drinks, Chicago pours into it also drainings from her immense cattle-yards, and from the great slaughter-houses, where the animals brought to her doors from the whole of the Northwest are cut up and packed for the consumption of the world."

The following is a description of a branch of the Chicago River, into which the refuse of the stock-yards is poured. It is clipped from one of the daily journals, and from observations we can declare its truth:

"The South fork is that fork of the South Branch of the Chicago river starting at Thirty-ninth and Halstead streets, and emptying into the south branch in Bridge-

port, near the pumping-works. It is about three miles in length, and is the filthiest of all the branches of the river. The foulest, filthiest, deadliest section lies just north of the Union Stock Yards, and is about one mile in length, from one hundred to two hundred feet wide, and from nine to eighteen feet deep. It is wholly unprotected as to shade, there being no trees nor houses on either side, and when the sun shines upon it it seethes and boils like a great caldron of oil. To many intelligent people an inspection of the waters of this inland body would be a revelation. The dark, seething mass lying between the two banks of what was once a respectable creek cannot be called water. It is not refuse in its ordinary state. If it were white instead of black, it might be taken for yeast. Its consistency in some quarters is about the same as paint, and when it comes in contact with the hull of a vessel it leaves a coating usually about an inch in thickness, which has become known to the marine classes as 'stock yards paint.' Something of its character may be judged from the fact that water will not wash it off, and that the only way it can be removed is by taking the vessel into the dry-docks and using a steel scraper. Unlike the ordinary paint, it does not serve to prolong the use of timber, but, on the contrary, serves to hasten its decay.

"No living thing can drink this water and survive. It is a poison even to the grass that grows along the shore if poured upon it in large quantities."

Professor Hyde continues: "The witches' caldron, here correctly described, exhales its pestilential breath about two miles from the spot where some of the wealthy 'packers' of this city have erected palaces which a king might envy, their costly stones overlooking the fashionable thoroughfare, where youth, beauty, premature age and folly drive their showy equipages in a splendid ignorance of what is floating beyond!"

Is it any wonder that the Chicago hospitals are crowded with typhoid fever patients? A small proportion of the cases, however, really reach the hospitals. More particularly in the southwestern portion of the city, there are large Irish, German, French, Italian, Polish, and Bohemian colonies The inhabitants exist upon the barest necessities of life, in wretched, foul, filthy, hovels. The sewers are elevated above the level of the tenement-houses. Here the typhoid fever patient usually perishes and is buried before the disease is recognized."

Suprapubic Lithotomy, and Suturing the Bladder.—The Medical News reviews this interesting subject as follows:

"Within a year Sir Henry Thompson has operated for the removal of stone in the bladder by the suprapubic operation four times, and each time successfully. This measure of success has led him to make public some strong expressions in regard to the merits of this form of lithotomy. After speaking of the capabilities of lithotrity, in the Lancet, for July 25, 1885, he says: "The problem thus left remaining for solution, is, what is the best cutting operation for hard calculi (urates and oxalates) which weigh from about two ounces and upwards, as well as for those not quite so large, which are so peculiar in form (as occasionally, but very rarely, happens) that the lithotrite fails to grasp, or retain them? I think there is no doubt about the answer—viz., that it is the suprapubic, and not the lateral position." And, again, "Finally, I think I am quite justified in believing that unless the operator has had a large experience of lithotrity (and there are not many of whom this can be affirmed) the high operation would generally be a safer proceeding than crushing for a calculus which is hard and much above an ounce in weight." In the same number of The Lancet, Professor Humphrey recalls attention to an operation of this sort which he did in 1848 successfully, and expresses his surprise that the suprapubic operation has not been more frequently performed.

These testimonials to the present appreciation of the operation of suprapubic lithotomy in England mark a distinct advance in

public sentiment there, where hitherto this method has had but the faintest and most qualified acknowledgment, and, from Sir Henry Thompson himself, hitherto open contempt. Now, however, that so eminent and so conservative a surgeon has given his sanction to the suprapubic operation, its good may be said to have received the guinea's stamp, and to be current in all the Queen's dominions.

It is now about ten years since the merits of this, then almost abandoned method, were made the subject of thorough study in this country, and warmly championed upon theoretical grounds, as well as supported by analysis of a very large number of cases. At once it began to be practised with increased frequency in America; then it was taken up with new assurance in Austria; then in Holland; then in Germany, where it has always had some friends; then it had a genuine revival in France, and now it has secured the approval of the highest authority in regard to operations for stone in the bladder in Great Britain.

It would appear, therefore, that the time has passed for arguing about the worthiness of suprapubic lithotomy, as a general method; since the old prejudices have gone down so completely before the arguments used in its support, and the improvements introduced in its technique. It would seem that the future of stone operations remains with Bigelow's operation of litholapaxy and suprapubic lithotomy, and the only questions which have now a living interest with regard to the latter are those which pertain to the proper selection of cases and the manner of performing it. In regard to the selection of cases it would not be easy to improve on what we have quoted above from Sir Henry Thompson. As to the technique, the plan of forcing the bladder up out of the pelvis by introducing a colpeurynter into the rectum and distending it with air or water, as was first done by Peterson, of Kiel, appears to be of great value. It may, perhaps, be responsible for the moderate hemorrhage reported in some recent cases, on account of the pressure it effects upon the venous plexus at the neck of the bladder; but it cannot be doubted that it has contributed much to the ease of performing the operation, and invited men to take it up who otherwise would not have done so.

In regard to after-treatment, the most important question concerns the employment or rejection of suturing the bladder.

This would appear to be no question at all if such brilliant results could be obtained regularly as have been affirmed in a considerable number of cases. Thus Bruns, who was the first surgeon to suture the bladder after lithotomy, secured uninterrupted union of the wound in his first two cases, both being little children. This was in 1857 and 1858. (These operations are often erroneously attributed to Lotzbeck, who simply reported them. They were done in Brun's clinic. The bladder was sewed up during the Crimean war by Baudens, after the removal of a bullet by suprapubic cystotomy; recovery followed. Although this was not a lithotomy, it deserves to be mentioned, as the first case, so far as we know, in which an attempt was made to secure primary union of the bladder after an operation for the removal of a foreign body.) The variety of methods of closing the wound after suprapubic lithotomy is very great, but they may all be divided into those which close the bladder wall independently and those which close this and the wall of the abdomen together. The latter procedure has not been often carried out, although it has sometimes secured a brilliant result. The former has been done a considerable number of times, probably not much less than a hundred. The results have been so far from uniformly successful that it may be seriously questioned whether or not suturing the bladder be a method to be recommended. It will be admitted that this question can only be answered in the affirmative, if theory alone be considered. And, however imperfect may be the success as yet attained by it, the ideal operation of lithotomy must be held to include closing the wound, and securing primary union. This has been

done a good many times, and can be done yet more.

But, in the present state of the technique of suprapubic lithotomy, we think it safe to qualify our statement that suturing the bladder is to be regarded as essential to the ideal operation. The ideal operation implies conditions suited to it, and, without going into details, we think it will be acknowledged that such conditions are not found in a considerable number of cases of stone operations. Suturing the bladder is manifestly out of place in cases in which the condition of the bladder is such as to preclude the idea that it can heal up by primary union, or in cases in which free drainage is manifestly a desideratum. Again, it is not suited to cases in which the size, shape or position of the bladder, or of the neighboring parts is such as to make the procedure very difficult, or to prevent its being accurately—we may say perfectly—carried out. In these cases, certainly, it is far better to treat the wound after suprapubic lithotomy like the wound of perineal lithotomy—that is, to leave it open, and to secure free drainage through it.

For cases in which suturing the bladder is suitable, Znamenski recently proposed to bevel off the internal mucous edges of the wound, because he believed they got caught and turned in between the united edges when the sutures were tightened, and so prevented union. And Vincent has still more recently suggested beveling off the external edges of the wound in the bladder, so that, when the stitches are drawn upon, a larger fresh surface shall be brought together, and the chances of union thereby be increased. This idea, which he never put into practice, has been taken up and carried out by Géza, of Antal, who reports in Langenbeck's Archiv, Bd. xxxii. 2 Heft, 1885, under the title "Eine Modificirte Sectio alta," a case of lithotomy and a case of removal of a morbid growth, in both of which he secured primary union by suturing the bladder in this way. The first patient was dismissed cured in twelve days, but was really fit to be dismissed in nine days. The second patient made an equally prompt recovery.

The plan of Dr. Géza consists in exposing the bladder by the usual method, after distention of the bladder and the rectum, and then in freshening an eplliptical space a little longer than the proposed incision in the bladder and from one to one and a half centimetres in width. This freshening is carried so deep at the line of the proposed incision that there is little left but the mucous membrane of the bladder, which is afterwards incised and the stone removed. The sutures he uses are of silk, rendered antiseptic with corrosive sublimate; catgut, he believes, gives way too soon. Each stitch is to be applied so as to include all of the bladder wall, except the mucosa. The wound in Dr. Géza's case was covered with Lister's dressing, and a soft catheter left in the urethra.

It is worth while to call attention to this proposition of Dr. Géza, because it is ingenious, and, reasoning from the analogies of operations for vesico-vaginal fistula, its execution may be expected to make the sutures much more reliable than when they were applied in a simpler fashion. It is to be noted, too, that this is a very different thing from the Lembert suture, which is very good in its way, but which seems to offer less hope of prompt union from the apposition of two serous surfaces than this one does from its apposition of two fresh-cut surfaces. In addition to this, the fact that it has already proved so successful in the hands of its proposer is strong recommendation to its further employment.

No study of the plans of suturing the bladder after suprapubic lithotomy would be complete which omitted consideration of an ingenious method used in 1876 by Dr. Starr, of Georgia, his patient recovering in sixteen days. This case was first reported by Dr. Dulles, in an article on suprapubic lithotomy in the American Journal of the Medical Sciences for July, 1877, and again, by the operaator in the Atlanta Medical and Surgical Journal for December, 1877. The suture used was of silver wire; it was interrupted; each stitch was passed into the abdominal wall at one side of the wound and made to

include a small portion of the outer layers of the bladder wall; it then passed across the incision and included a similar small portion of the outer layers of the bladder wall on the other side; it then passed up through the abdominal wall to the surface. When drawn tight it slightly inverted the bladder walls and brought the edges of the abdominal incision close together. It is easy to see that this form of suture must tend to prevent burrowing of discharges between the bladder and parietes of the abdomen, while it gives a good hold to the stitches which close the bladder itself.

The success obtained by Dr. Starr in its use should encourage others to imitate him. Certainly no better result could be asked for than he obtained.

We sincerely hope that American surgeons will not be backward in contributing their share to the solution of the problem as to the best way to conduct this operation. Its present standing is largely due to their courage in defending and practising it at a time when it was held in much lower esteem than it is now; and we believe the genius in dealing with practical questions in medicine and surgery, which has always been conceded to them, cannot fail to prove of great value if applied to the question of the best method of treating the wound after suprapubic lithotomy."

The Treatment of Nevus by Ethylate of Sodium.—Samuel Welch writes to the Bristish Medical Journal: "For some months past ethylate of sodium has been extensively employed by me in the treatment of cases of nevus occuring in children, and up to the present I have every reason to be satisfied with its use. I paint over the nevus two coatings of the ethylate on two consecutive days, taking care to protect the surrounding skin before the application, and in all instances of superfical nevi thus treated, have found them cured on the separation of the scab. Those cases affecting the subcutaneous tissues generally require a second, or even in some cases a third, repetition of the remedy.

It seems to leave less scar than nitric acid, to cause less pain to the child, and, undoubtedly, of all applications is the one least dreaded by the mother."

Hysteria in Males.—At a recent meeting of the balneological section of the Gesellschaft fur Heilkunde, Berlin, Dr. Joseph, of Landeck, read a paper upon this subject, describing two cases. An apprentice in a house of business, "of good family," had an attack of acute rheumatism when 18 years of age. Convalescence was protracted and followed by great distension of the stomach, hiccough, and general clonic spasms of the voluntary muscles, forcing the trunk suddenly into all manners of attitudes, and causing obstructions to deglutition, etc. After treatment at a hydropathic establishment, all these symptoms disappeared, but were followed by ptosis and right motor hemiplegia, with hyperethesia on both sides of the body. The convulsions returned after the paralytic symptoms had abated. Dr. Joseph then examined the patient, who appeared to be robust, muscular, and ruddy complexioned. He stared suspiciously at bystanders, and was very excitable. He walked slowly, and with the aid of a stick, dragging the right foot. Percussion of the thorax caused opisthotonus; the six lower dorsal verterbræ were especially sensitive. The appetite had become very good, and globus was frequent. The bowels remained constipated for days or even weeks. No history of sexual abuse of any kind could be traced. After ten weeks of hydropathic treatment, he left Landeck apparently cured. It was found that the patient's grandfather, who had recently died, aged 78, had suffered for fifty years from hysterical fits, precisely similar to those observed in young women. The second case was that of a robust horse-dealer, aged 38, who had a flourishing business in Prussian Poland. He had served for three years in a German cuirassier regiment, and was father of a large family. Four years before consulting Dr. Joseph, he caught cold, and aphonia followed. A little later, clavus was complained of, and then he began to have

convulsive attacks, without loss of consciousness, but with loss of power of speech. These attacks were often followed by vomiting. Then, when he applied to Dr. Joseph, he became subject to globus, hoarseness without objective laryngeal symptoms, and great mental irritability. The physician witnessed a fit. The patient, a very tall strong man, lay stretched out in bed, with clonic convulsions of all his extremities; he was quite conscious but could not speak. There was constant hypereasthesia over the interscapular region, the lower cervical and upper dorsal vertebræ, but not in the iliac region. The patient was relieved by hydropathic treatment. There was no family history of hysteria or epilepsy.

CONTRIBUTION.

PRESIDENT'S ADDRESS.

BY F. W. BEARD, VINCENNES, IND.

Delivered at the Meeting of the Mississippi Valley Medical Society, Evansville, Ind., September 8 and 9, 1885.

It has been said that the first decade of a young man's professional life will decide his future career either for success or failure. And that which is true of individuals is true of societies. As you are aware this meeting closes the first decade of this society. It occurs to me that it will be found profitable and interesting to take a retrospective view over the field that has just been traversed and to record a few facts of the unwritten law of the Tri-State Medical Society.

On the 20th day of May, 1875, returning from Indianapolis, where we had been attending the Indiana State Medical Society, Dr. Ben Newland suggested that there should be a meeting of the different county and district medical societies in this the corner of the three states of Indiana, Illinois and Kentucky, for the purpose of renewing old acquaintances and making new ones. That we might become better acquainted and improve ourselves by discussing purely professional and scientific subjects, excluding all legislative ethical questions. To meet in a free and easy way and enjoy a kind of a "love feast." Accordingly the following committee was selected to make arrangements for the meeting:

Dr. F. W. Beard, Vincennes, Ind.,chairman; Drs. A. J. Thomas and H. M. Smith, Vincennes, Ind.; Drs. J. W. Compton and A. M. Owen, Evansville, Ind.; Drs. B. F. Swafford and L. J. Willïen, Terre Haute, Ind.; Dr. Marshall, Olney, Ills.; Dr. J. H. Letcher, Henderson, Ky.; Dr. S. E. Munford, Princeton, Ind.; Dr. G. W. Burton, Mitchell, Ind.

Vincennes was selected as the place for the meeting. After considerable labor and correspondence the following gentlemen were appointed officers of the meeting: Dr. William Massie, of Grand View, Ills., was chosen president, and consented to preside and deliver an address and was put on the programme. But a short time before the meeting I received a letter from him stating that his health was so bad that he was compelled to resign. That he would try to attend the meeting but not to preside. He did not attend the meeting and in a short time died. Dr. B. F. Swafford was chosen in his place, presided and delivered an address at the meeting. These gentlemen were selected because they were members of the Æsculapian Society, the oldest district society in the proposed territory.

Dr. W. J. Bray, of Evansville, delivered an address on surgery. Dr. J. B. Armstrong, of Terre Haute, delivered the address on the Practice of Medicine. Dr. G. B. Walker, of Evansville, delivered the address on Obstetrics. Dr. H. H. Chase, of Salem, Ind., and Prof. C. W. Wright, of Vincennes, Ind., who were selected to deliver addresses on Materia Medica and Chemistry, were not at the meeting. The meeting was held in the city of Vincennes, October 26, 27 and 28, 1875. Dr. G. W. Burton was elected recording and Dr. F. W. Beard corresponding secretary. Alfred Patton was elected treasurer. At this meeting it was decided to make it a permanent society and it was christened "The Tri-State Medical Society of Indiana, Illinois and Kentucky." The second meeting was also held at Vincennes October, 1876. Dr. J. W. Thompson, of Paducah, Ky., presided. The third meeting was held at Evansville October 16, 17 and 18, 1877. Dr. Wm. H. Byford, of Chicago, presided. The fourth meeting was at Springfield, Ills., November 13, 14 and 15, 1878. Dr. J. F. Hibberd, of Richmond, Ind., presided. The fifth meeting was held in Evansville, 1879. Dr. Ireland, of Louisville, Ky., presided. The sixth meeting was held in Louisville, Ky., November 9, 10, 11 and 12, 1880. Dr. H. B. Birch, of Springfield, presided. The seventh meeting was held in St. Louis, October 25, 26 and 27, 1881, Dr. A. M. Owen, of Evansville, presided. The

eighth meeting was held in Terre Haute, Ind., September 26, 27 and 28, 1882. Dr. J. M. Holloway, of Louisville, presided. The ninth meeting was held in Indianapolis September 18, 19 and 20, 1883. Dr. William Porter, of St. Louis, presided. At this meeting the name was changed to the "Mississippi Valley Medical Society." The tenth meeting was held in Springfield, Ills., September 23, 24 and 25, 1884. Dr. B. M. Griffith, of Springfield, presided. And to-day, at the close of the first and at the beginning of the second decade in the history of this society finds us again assembled in the hospitable city of Evansville. I am exceedingly glad to see present a number of the ever faithful "Old Guard." We have had at these meetings men of various types of high tone, loyal to their profession, strong men and true; men of sparkling genius, and of varied and solid attainments; those who have grown gray in the practice of their chosen profession, richly laden with the golden harvest of life's long experience; and those blessed with youth, energy and ambition engaged in laborious research, deeply imbued with the true principles of sound philosophy all ready to lay their individual contributions upon the shrine of our profession. This pleasing thought and the pleasure of seeing so many faces that beam upon me with the light of recognition, and others, though strange to-day, but with whom I hope to become equally acquainted, fills my heart with gratitnde. But, again, when I look and see so many vacant seats that once were occupied by so many of our former associates, "who became weary, took their burden for a pillow and laid down by the wayside to sleep that dreamless sleep that kisses down their eyelids still," I am filled with grief almost too full for utterance. I think of the loss that the society has sustained by the death of the venerable Drs. Massie, Read, Barton, Gerrish and Patton. Notwithstanding they had grown gray by the exposure of long lives spent in the practice of medicine, all went down with the harness on. Dr. Single is gone. Those of you who were present at the last meeting in this city will remember the lively interest he took, and how we were thrilled by his enthusiasm and eloquence.

At the close of the last meeting in Vincennes, in 1876, Dr. J. B. Armstrong, when he bade me "good-bye," stated that he was so delighted with the meeting and so hopeful for the future that he intended to work for the society and was sure to be at the next meeting,and would come by Vincennes and he and I would go to Evansville together. But before the next meeting, sad to say, with his fine physique, unsurpassed urbanity and lofty ambition, he was cut down in the prime of life by the bullet of an assassin. In his death the society lost one of the most zealous and devoted members. Why was Vincennes selected for the first meeting and to give birth to this society? To answer this question you must indulge me in a few facts in the history of this old medical centre. When first approached by French explorers in 1688, the Miama Confederacy claimed and possessed the region watered by the Wabash and its tributaries. The polity of these rude and unlearned people, erratic and naturally averse to labor, did not affect permanent homes or fixed habitations. But this, which they called Chip Kaw Kay, was their most populous and permanent town, not a trace of which remains at present, except in excavating for buildings we sometimes find deposits of human bones and a few heaps of ashes. And dating back far beyond the years of our history we find this the favorite spot of the prehistoric race of the stone age, for the erection of their temple, habitation, and sepulchral mounds of which the long past though silent is not entirely voiceless.

In 1762 a band of French missionaries returned and planted a missionary post which remains a monument to their heroic deeds. From this eventful period the population made steady but slow progress. But for a period of ninety years the only doctor to guard the lives of these primitive people was the priest, the Indian medicine man, the old granny woman and unlearned pretender, At the close of this period, which was 1792, Dr. Tisdal, the first educated physician in this part of the country and in the State of Indiana, located here for the practice of his profession. I am sorry that I am unable to get his history, for this established here a new era in medicine, since which time the Old Post has become the proud, vigorous and lusty sire of many a stalwart son. Indiana was admitted as a State of the Union in 1816, and the year following we find the medical men of this section of the country meeting at Vincennes and forming a medical society, the first in this part of the country and the first in the State of Indiana. At their next annual meeting this Spartan band passed resolutions recommending the formation of a State Society, and petitioned Congress to pass an act for the formation of a national pharmacopeia. At the formation of this society, fifty-eight years later, what greater honor or tribute to the memory of these brave, honest

and diligent workers in the cause of humanity and scientific medicine than for the profession of this locality to meet there in the same old city and form a medical society for mutual fellowship, improvement, recognition, and to renew the vows which they gave each other to ever protect and defend the interest, honor, and dignity of scientific medicine. How honestly, intelligently and faithfully we have fought the fight and kept the faith let the past ten years' history of this society be our witness. It was said, prior to the formation of these societies, each physician found himself an unit divested of all communication with others engaged in the profession beyond the boundaries of his own practice. The physician thus circumscribed in his associations, with no outlook that reveals any objects of professional interest beyond his immediate horizon, is sure to find his early aspirations and loftiest ambition progressively and permanently die. His love of science and scientific attainments will soon give place to mere art, and his art will run into routine, thus converting the grand temple of Æsculapius into a mere bread and butter factory. He will make his diurnal and annual circuit like the slave on the tread-wheel, uninfluenced by time, seasons or circumstances. The older and most distinguished physicians were generally strangers to each other and seldom met except in some casual manner, separating again without special significance beyond that which springs from transient associations of persons of diverse callings. The drudge of all classes, each used him for his own purposes. The lawyer used him for his client, the preacher for his services, the politician for his vote, the merchant for his patronage, the mechanic for his custom, the farmer from necessity, and all held him under obligations for accepting his services. This was less from the lack of ability and disposition to assert his rights and privileges than from the absence of that association and fellowship of members of the profession which indicates community of feeling, reveals identity of interest and leads to co-operation of effort for the advancement of mutual advantages.

The people who first settled this great Mississippi valley were generally poor and were deprived of most of the luxuries, common comforts and often the necessaries of life. The country was an unbroken forest with large marshy, undrained and unbroken prairies. The banks of the rivers were not protected by levees as now, thus exposing large portions of country to frequent overflows, and the rank growth of vegetation decaying and perpetuating the moisture of the ground. Added to this were the primitive habits of the people and their total ignorance of all sanitary laws. All of these conditions produced a type and class of disease peculiar to such a country and people. I am not a believer in the change of the type of disease only as caused by the different circumstances and conditions of life. We find about the same diseases occurring then as now, the difference being marked more in degree and frequency than otherwise.

In the last half century there has been, as you are aware, a great change in the treatment of the diseases peculiar to this locality. This change is by some claimed to have been produced largely by the different so-called systems of medicine that have flourished in the last fifty years, viewing them as special committees investigating special subjects. I am not a disciple of this doctrine. I think it more appropriate to compare them to water sprouts that have sprung from the body of the profession, growing rapidly and flourishing for a season. But soon the leaves withered and the branches crumbled, leaving but small knots to mark the spots where they had been. No, gentlemen, the change in the treatment of disease is the natural result of the shrewd observation, patient investigation and careful study of diseases and their remedies by members of the regular profession, the interchange of thought and the discussions in just such societies as the Mississippi Valley Medical Society rather than from the accidents of ignorant charlatans. About the year 1825 the notorious Thompson introduced his botanic treatment into this section of the country. I believe he wrote a book telling the people to be their own doctors, that all minerals were poisonous and that roots, herbs and barks would cure all the ills to which human flesh was heir. His Sampsons were Lobelia and Capsicum. This, as might naturally be supposed, soon filled the country with self-made doctors. These parasites on the body politic, whose ignorance was equalled only by their impudence, were called "Steam or Patent Doctors," and they went about the country seeking whom they might devour.

One typical case which I find reported will suffice to give a vivid idea of their peculiar practice:

In a certain rural district where Granny B—— had long held sway as the chief medical adviser, one of the neighbors went on a visit and luckily came across Dr. Thompson, of whom he bought a patent and opened a shop as a patent doctor. There was a poor boy in the neighborhood afflicted with asthma which had resisted the skill of Granny B——

The reluctant mother was persuaded to send for Dr. P ——. The doctor came and began to prepare his medicine and fixtures when the mother suggested to him to examine the child and see what was the matter. Dr. P—— answered, "It is unnecessary, madam, to know what the disease is. We patent doctors do all things by a regular system. We put 'em through a course of medicine. Then we steam 'em. Then we sweat 'em. This brings on the alarming symptoms and if they get through it the disease is broke, no matter what it is. Now, madam, get me three tin cups. Put on a kettle of water and we will put him through a course." In one cup he made a decoction of Lobelia, in another solution of Saleratus in another a decoction of May Apple. About one half of the decoction of Lobelia was given, followed by a like quantity of the solution of Saleratus. Then after administering warm water the order of nature was reversed and the contents of the stomach brought forth. After this process was repeated to the entire satisfaction of the doctor, who at each emesis would exclaim, "What vicious stuff! What vicious stuff!" May apple was given to turn it downwards, which in time had the desired effect to suit the doctor's views. He then prepared for the last part of the course, which was accomplished by means of long tin tubes extending from the vessel of boiling water in the fireplace to the bed clothes. So hot was the water that it removed the skin wherever it came in contact with the patient. It did not take long after the previous gentle usage to bring on the alarm. And so fearful was it that all in the house, even the doctor himself, thought the child dying. So he gathered his paraphernalia and had pressing business elsewhere, feeling better as he continued to put territory between himself and his patient. The mother maintained her self-possession and at length succeeded in nursing the child back to life again, declaring that no more patent doctors should put her child through any more of their courses.

The steam doctor flourished until 1835. About this time he was succeeded by the Eclectic—a gatherer up of inconsiderable trifles thrown away by others. He was like the ostrich which grew fat on bits of nails and pieces of glass, or such other scraps as he might be able to find. Shortly after this another monstrosity was born and christened "Physio Med." Just what this strange specimen was or what mission on earth he filled I have never been able to learn. However, they soon perished for the want of sustenance. The funeral baked meats of these unfortunates were used for the wedding feast of another, who came perfumed like a milliner with the dearest pet of a name and the tiniest sweetest pills, claiming to be the legitimate son of a noble sire, the immortal Hahnemann, whom like Paul, I suppose, much learning had made mad, or if you will permit me, the use of a slang phrase, a "professional crank." And this unfortunate condition of mind appeared to be hereditary and was entailed on all his progeny. I am happy to be able to record the foregoing relics of barbarism as a part of the history of a by-gone age. Yet, it is humiliating to know that we still have in some localities, continuing to prey upon the ignorance and credulity of a too credulous people—this infinitesimal humbuggery, the most nonsensical of all "systems" of charlatanry, if it can be dignified with the name of a system. Nor is this all. Let Dr. Lighthall come to town and establish himself on a street corner with two or three fourth-class minstrel performers and a lot of cure-all. He will attract more attention and take into his coffers more filthy lucre in a single evening than would be possible for you in a month of hard professional labor.

A short time ago I had occasion to pass one of our business street corners. And there, mounted on a dry goods box, with a flaming light, was a street hawker who called himself an Indian doctor. He had a dozen paper rolls by his side which he said were diplomas from as many of the principal medical colleges of the United States. As though an Indian doctor had any use for diplomas from scientific medical schools. He was not dressed like an Indian, a scout or civilized man. He had on a cap made of raccoon skin, with the tail hanging down on his back. He also wore some kind of a buckskin coat. Altogether, he was as ridiculous a looking specimen of humanity as I ever saw. He was delivering a medical lecture which was about as nonsensical as his costume. Yet he held his crowd, and in a short time began to sell his wonderful medicine, which consisted of ground weeds that I suppose he manufactured from the weed most easily procured as he traveled. It was done up in small packages. He did not even go to the expense of buying boxes or bottles. He sold the packages for fifty cents each, and, curious enough, he sold this stuff as fast as he could hand it out and rake in the half dollars. This he did for about two or three hours, and in two evenings he sold one thousand packages and pocketed five hundred dollars.

Again, we have a doctor recently licensed

as a practicing physician under the provisions of the recent law passed by the legislature of the state of Indiana, in her majesty and wisdom, to protect the dear people from the evils of ignorance and quackery. I was fortunate enough to procure one of his prescriptions and also the modus operandi of his remedies. For "rumatism" put one ounce of "rubarb," one ounce of cream tartar, one ounce of sulphur, one ounce of gum guacum, in a pint of whiskey, and take a tablespoonful three times a day. Rheumatism comes from disease of the liver; rhubarb acts on the liver. With rheumatism there is always a fever; cream of tartar cools the fever, sulphur cleanses the blood, and the guacum is sure to scare away the rheumatism. We are glad to know that this kind of practitioners is growing less from year to year. But the lamentable fact that they still exist in a community where we have had educated physicians laboring ever since the days of Dr. Tisdal, now ninety-three years, and where there have been working medical societies for sixty-eight years, teaches us that our zeal and labor in behalf of long suffering humanity is still in demand.

The ever-changing aspect of medicine, considered as a science, has been frequently taunted, and its varying condition as an art has often been the basis of positive denunciation; and it behooves us to inquire into the real ground of such deprecatory remarks. Even among ourselves, in the midst of our own body, there is manifested a spirit of infidelity, or at least a hypercritical disposition to impugn the safety, the usefulness and the propriety of all therapeutical administration, and to discourage all direct interference with the sick, and to protest against all prescriptions for them, and to recommend a reliance upon nature as the wisest course of conduct. Against this most impotent and negative doctrine the blank despair of progress which it implies is, I think, a broad and conclusive argument. On this ground alone I reject it peremptorily and finally. Experience may be fallacious and uncertain, and testimony may lead us into error; for our senses and our reason often lead us astray. Yet it is not only absurd but it is impossible to refuse their direction. We cannot stand still; we must proceed upon the data afforded us by our senses, our experience, by testimony, the experience of others, and by our reason employed in collecting, weighing and valuing these. From these sources we are enabled to deduce rules for our advancing movements.

A singular misapprehension exists in a portion of the public mind in regard to the true character of medicine as a science. Some suppose it to be a system of guess, or at best a more or less shrewd and adroit adaptation of means to ends without the guidance of fixed and established principles, and that there may be varying systems, better or worse as the case may be, and it is of little import which is adopted. But it is needless for me to say this is a gross error. Science is classified knowledge, facts reduced to series and their relations made known. And there can no more be two sciences of medicine than two sciences of logic, chemistry or anatomy. Science is kingly, and brooks no rival near its throne. The science of medicine is catholic. It embraces all the facts of man's structure, organization and phenomena of life, and all things whether material or immaterial which influence it in health or disease. It rests solely on scientific truths, discovered by precisely the same methods of reasoning which guide all arts founded upon science. It is not exclusive, save as truth must ever exclude error. It is not restrictive, save as fact must ever prevent incursion of falsehood. Its principles, like other grand truths of nature, cannot be changed in the narrow confines of a rhetorical sentence.

It is needless to repeat the fact oblivious to all familiar with the progress of the sciences, the elucidation of which is the glory of our age, that no other class of men has a record on their pages of honor equal to the medical profession. We point with pride to the roll of names linked to immortal fame because of the daily contributions to that knowledge which is lifting this age so high above all the centuries of the past. And we challenge the production of a like number from any other class of men. Why is it, then, that any portion of an intelligent community should permit mere pretenders and knaves even the semblance of social equality?

In conclusion, gentlemen, permit me to say that you, as the only true representatives of the medical profession, are bound by every sacred and moral obligation to devote your best energies to your profession. You should regard human life in all conditions and aspects as sacred. We often complain that we are ignored in health, yet we are always implored in disease, distress and the carnage of the battle field, when pestilence is busy in the work of destruction, and the love of gain gives place to the love of life, when all that possess the means of flight hurry from the fatal spot, and when victims by the hundreds are swept into eternity. Is it the paltry consideration of fee, think ye, that chains the physician to his post? He remains firm in the midst of death. Whilst others tremble

he moves like a ministering angel, where the hot breath of contagion wafts poison on its wings; and calmly and fearlessly he perils himself to soothe the pillow of a dying wretch or to administer balm to those who suffer the double burden of poverty and disease. At the same time he knows the danger to be silent, assiduous and deadly; there is no cowardly shrinking of his heart, no fear of self. But, true to the sublime principles which he possesses, he is ready to yield his life as a pledge of the sincerity of his faith. Scenes of solemnity and awe naturally associate themselves with scenes of suffering and death. We often witness occurrences calculated to touch the deepest and most delicately strung cords of the human heart. Sobs of agony and sighs of anguish bursting from broken hearts, fair hopes and confiding affections scattered to the ever-changing winds by the freezing breath of the destroyer, are among the melancholy associations that strew themselves in sombre perspective along the physician's path.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, Sept. 19th, 1885, Dr. G. Hurt, president pro tem, in the chair.

Epithelioma of Rectum—Specimen.

Dr. H. H. Mudd presented a specimen which was a portion of the rectum removed a few days ago. The patient, a man of about forty-five, has always been healthy, and has temperate habits. He experienced no trouble with his bowels until about a year ago. During the past four or five years, however, he experienced pain in the neighborhood of the sacral region; and, during the past year, he noticed some disturbance in the bowels and supposed that he was suffering from hemorrhoids. During the first six months of the past year he had hemorrhages from the bowel, and during the past three months he found it difficult to defecate. At one time the bowel protruded, but it has not done so lately. Upon examining the rectum, Dr. M. found irregular nodules just above the margin of the sphincter ani, about on a level with the internal sphincter. These nodules extended around for about three-quarters of the circumference of the bowel, more extensively over the right border of the prostate than over the left. Vertically, this growth measured from three-quarters of an inch to one and one-half inches, being greater on the right side than upon the left. The mass was not hard, but seemed to rest upon an indurated base, and it had the soft, velvety feel that we find accompanying a papillary growth. The operation consisted in cutting an opening from the anus to the sacrum, cutting the tissues behind the rectum and turning out the lower portion of the bowel. The incision was made just above the sphincter and the implicated part was dissected away. The upper part of the gut was then brought in contact with the sphincter. Two bone drains were carried out posteriorly, and the sutures used were catgut. So far the patient has done well. There was a little fever on the second day, but it is healing nicely now. The specimen shows a greater superficial area than would be thought, judging from its depth. The growth itself extends slightly into the submucous tissues. The speaker did not follow the rule laid down by the authorities of removing a complete section of the bowel, so as to avoid folds. He felt free to disregard it, as the folds, if any would form, would be in front and would not interfere with defecation. Besides the rectum adheres more closely to the prostate than at other points, and hence the less liability of the formation of folds.

Dr. Hill inquired what the character of the growth was.

Dr. Mudd regarded it as an epithelial cancer, but it failed to present some of its characteristics. He thought it might be an early form of epithelioma.

The society then adjourned, subject to the call of the president.

CLINICAL LECTURE.

DELIVERED AT THE NEW YORK HOSPITAL BY ROBERT F. WEIR, M. D.

Clinical Prof. of Surgery at College of Physicians and Surgeons, New York.

Case I.—Strangulated Inguinal Hernia Operation. Patient is a young colored boy, æt. 22. For the last ten days has had an inguinal hernia which came down completely, but had always been returned. In the same side (left) he had an absent testicle. This testicle would descend when the hernia came down. The hernia has been caught down two or three times. The tumor became distended. There was pain in the abdominal cavity asso-

ciated with hiccough. The night before last, patient had some serious symptoms. He called a physician, who made an attempt to reduce the hernia. He administered a quantity of morphine so as to quiet the pain. Under the influence of morphine oftentimes a hernia that has been caught in the sac will allow so much relaxation of muscular tissues about the sac as to permit of the widening of the mouth of the hernia to be returned.

Now, strangulation occurs either at the internal ring, external ring or the mouth or bottle-shaped prolongation of peritoneum. As the hernia comes down, it pushes the peritoneum along with it.

Anesthesia should be employed in the reduction of a hernia. Either ether or opium is beneficial. The patient is now under the influence of opium. He has a temperature of 102°; pulse 135. The hiccough has continued. There is more tenderness about the tumor. It is an interesting surgical point to determine when to interfere in any case,and in no case are we more concerned and compelled to exercise all the powers of our mind than in the case of hernia when to interfere if we are in doubt. I never regretted interfering too early, but have a number of times regretted waiting too long.

The operation for strangulated hernia, without opening the sac, is only applicable to those cases which have been very recently and very moderately strangulated.

If the strangulation had existed in the mouth of the sac in the peritoneal prolongation, I would not have been able to relieve it so easily without opening the sac; but if in other localities, I might relieve the strangulation without running the risk of opening the peritoneal cavity.

This case requires an operation, for I would not dare to put back a hernia that had been down twenty-four hours. If the intestine is in the sac, it may be in such a condition of inflammation as not to be put back into the abdominal cavity. Then, again, I may find the omentum in a condition of necrosis which would be unfit to return. If I meet with a piece of inflamed omentum, I shall cut it off and tie it. I may meet with another complication, namely, I may find a testis at the bottom of this hernia. This testis may have been undescended between the two rings, and as the hernia pushes that down, it brings it to the bottom of the sac. The peritoneal prolongation closes generally at birth or a few days afterwards. A hernia may occur in contact with the testis as it descends, known as congenital hernia. If I find the intestine here to be atrophied, I shall remove it, as it is only a trap for intestinal fistula.

(The patient was placed under the influence of an anesthetic (ether) and an incision made to include the strictured gut. The stricture was divided and the surgeon came upon a piece of intestine which had suffered inflammation and death, leaving a pin hole opening in front and behind.)

Now, gentlemen, there is no more constriction here, as we have relieved the patient of that. His chances of recovery, however, I need hardly tell you, are very small. I shall have to cut out some of the gut, as there are two openings in the intestine, and sew the ends together, or make an artificial anus.

If there had been only one opening in front I could have tied it, but that would not suffice here, because as soon as my ligature had cut through, I may have a larger opening. But I was going to take the peritoneal surfaces up on each side, and close it over the little notch, which would have made it perfectly secure, because this intestine was in the peritoneal sac. Behind, however, there is an opening of considerable size, and I could not expect to put this idea into execution. Therefore, my anxiety was so to treat this patient that the intestine which was already down and damaged should not be torn away from the adhesions which had already formed around the internal ring. A little inflammation had already set in, which had glued the intestine to the abdominal cavity. We have secured the intestine and divided tied it between the two openings and it. Then we have fastened the gut to the skin. In other words, we have made an artificial anus.

Now, gentlemen, if this patient pulls out of this he will have a small fistula or artificial anus.

This illustrates what I have said in the early part of my remarks. It is a case which I wish I had operated upon yesterday. It adds additional weight to the practice which I already have given, namely, if I had operated earlier it would have been so much better for the patient.

Case II.—Fissuro in Ano. This patient is a young man, æt. 24. Several months ago after a movement from the bowels he began to have pain for fifteen or twenty minutes. After a while this pain would increase in duration, lasting for several hours. He had been constipated for some time past. There is a splitting of the mucous membrane, redness of the surfaces surrounding the anus. This was preceded by a little pile. A little hemorrhoidal vessel may be caught and strained by defecation, and the crack take place on the same

principle as a crack in the lip. The granulations are irritable. The ulceration has passed through the mucous membrane and exposed and invaded one or two fibres of the sphincter ani muscle. This done I now make an incision through the muscle two and a half inches long.

The patient will be given a suppository of opium or a dose of morphine by the mouth. This should be given for the first few hours so as to ease the part after stretching. A little hunyadi water is given and an injection of sweet oil, warm, should be used. Carry the tube of the injecting syringe opposite to the place where the ulceration existed. This done a bandage is applied and the patient placed in bed.

Case III.—Varicocele. This patient is a man of 36 years of age who is suffering from varicocele or a varicose tumor. This tumor consists of a bundle of veins situated in the scrotum.

Varicocele is more common on the left than on the right side. The explanation for this is that the spermatic vein is situated behind the segmoid flexure. If this continues the testicle on the side affected will atrophy from the presence of an extra amount of blood in the scrotum. The patient will have pains from the stretching of the nerves. Seminal emissions occur and neuralgic pains reflected to the bladder. The patient will become hypochondriacal. We can tie the veins and empty the scrotum, making a suspensory bandage out of the scrotum. Ligature of the veins can be done without risk. I propose to tie the veins in two places. First, by passing a needle between the veins and then carrying some thread above the veins between them and the skin.

CORRESPONDENCE.

LONDON LETTER.

London, September, 1885.

Editor Review: The chief event in the medical world in London since my last letter has been the delivery of the Bradshawe lecture at the Royal College of Physicians. This lecture has only been instituted about three years and is generally given by one of the younger Fellows. For this year Dr. Mahomed had been nominated by the vice-president, but his untimely death last autumn rendered it necessary to choose a substitute, and the choice fell upon Dr. Goodhart, an assistant physician to Guy's Hospital, and the author, quite recently, of a most excellent manual on the diseases of children.

Whether from necessity or of his own free will I know not, Dr. Goodhart chose Morbid Arterial Tension for his text, a subject which Dr. Mahomed had worked at more than any other, and which, it was well known, he had selected for his discourse. Notwithstanding its being in the middle of the dull season, and in spite of the drawbacks of the College Lecture Room, which is small and ill-ventilated to a stifling degree, a large audience assembled. Dr. Goodhart dealt chiefly with the theory of Dr. George Johnson, and that of Sir William Gull and Dr. Sutton. The former, the stopcock or spasmodic hypothesis, he had little difficulty in disposing of. It was unlikely, he pointed out, that the action of the muscular coat of the arterioles would be in antagonism to the cardiac function, and, moreover, there was an a priori probability that the muscular coat of the arterioles would be hypertrophied, inasmuch as they had more work to do, and as a natural consequence it must get thicker. And so, arguing from what he termed the intuition of experience, he urged that the arterio-capillary fibrosis scheme of Gull and Sutton, which he styled a magnificent scheme of decay, must, in the main, be true. He admitted that some cases of chronic renal disease were primarily renal, but he contended that it was equally certain that many cases were only part and parcel of a general degeneration. Dr. Goodhart paid a most graceful tribute to the memory of Dr. Mahomed, who was not only a colleague of his at Guys, but a valued personal friend.

Two fresh lunacy cases have recently been tried in our law courts, in each of which the medical man against whom the action was brought came off victorious, though in one the jury intimated that such was not the result they had intended their verdict to entail. In this instance a middle-aged maiden lady had become so eccentric that her mother and the other members of her family consulted the doctor in question, who had very little difficulty in deciding that she was insane, and giving a certificate to that effect. She believed that all the servants were Jesuits in disguise, that the nurse had tried to poison her little nephew by suspending a poisoned handkerchief on his cot, and that attempts had been made to poison herself. On two occasions she had sent water from the dinner table to a neighboring chemist to be analyzed, where, it is needless to say, no poison was detected. This was about as typical a case of insanity with delusions as it is possible to imagine, yet the jury had no hesitation in finding that she was not insane when sent to the asylum, and they further found that the doctor had acted in good faith, which resulted in the verdict being practically in his favor, though, as I have already stated, this was not what they had

intended. The other case was one which should never have come into a law court, as it was clearly a case of acute maniacal excitement, and was disposed of in favor of the medical practitioner in a very short time.

A great many of us are following with much anxiety the proceedings of those who are organizing the next International Congress, and I must confess to some disappointment that I have not been able to obtain from the pages of your journal a more frequent report as to how matters stand. If the organization is continued on its present basis it is quite certain that as an International gathering it will be a failure, and I need only refer to the letter of Sir James Paget to Dr. Hays, and of Sir William MacCormac to some one whose name escapes me at the moment, in support of this assertion. We in this country are of course not able to enter into and understand the merits or demerits of the vexed Old and New Code question, but, if I mistake not, the dispute has long outstepped those limits, and several staunch Old Coders have withdrawn from the Congress. The dispute has been severely commented upon here in the Medical Times, and to a less extent in the British Medical Journal and Lancet.

Gastrostomy was performed at the Children's Hospital, Great Ormond street, by Mr. J. H. Morgan on a little boy, whose age I cannot give you. Some months previously the child had swallowed some caustic potash, and was taken to the hospital a few weeks since with symptoms of esophageal constriction. Treatment by bougies being found impossible, at least it was considered doubtful if one had ever been passed into the stomach, gastrostomy was resolved upon, and the operation performed in two parts, at is now generally done. So far, I understand, the child is doing well, and if I can obtain the particulars and remember it, I will allude to the case in a subsequent letter.

There is a flutter just at present in the world of materia medica and therapeutics, owing to the new edition of the British Pharmacopeia which is just about to see the light, and every one who has written a book on the subject is busy bringing out a new edition in keeping with the alterations therein introduced. I believe there are a host of new drugs, and not a few of the old ones have been discarded. Some of the changes appear to be rather meaningless; for instance, quinia, strychnia and all the substances of this class are called quinina-strychnina, and so forth. A good deal of unnecessary trouble has been given, I believe, by the changing the botanical names in many instances, However, we shall soon know more about it, as the volume is to be out in three days. R. M.

NEW YORK LETTER.

New York, September 21, 1885.

Editor Review: The advent of cool weather has been marked by the resumption of work in the various societies. The first meeting of the Pathological Society occurred on Wednesday evening last. The County Medical Society does not meet till October, when occurs the annual election of officers.

The medical students are beginning to flock back to their old quarters; some to try the fall examinations which are about beginning at all the colleges; others to commence the struggle of medical study. The prospects are for as large classes as usual. The preliminary sessions of the University and Bellevue College have already begun.

It is now announced that Dr. H. B. Sands has not resigned his professorship of the Practice of Surgery at the College of Physicians and Surgeons. The truth seems to lie midway between this and the previous announcement concerning the matter. That he contemplates a resignation there is little reason to doubt. He will conduct his college clinics during the coming winter and deliver his didactic lectures on operative surgery. The rest of his usual work will be performed by the gentlemen whose names were mentioned in my previous letter.

The Post-Graduate Medical School and Hospital has just issued its announcement of the fourth year. Its hospital service is becoming more and more a feature of its work. The faculty announce that "during the year a large sum of money has been given the hospital by a benevolent lady, through one of the lecturers of the school for the purpose of fitting up and supporting a ward for the treatment of sick children." Dr. F. R. Sturgis still remains secretary of the faculty. There is a generous rivalry between this institution and the "Polyclinic." Both were organized about the same time and both are conducted upon the same basis. None but graduates in medicine are admitted. No degrees are conferred. The instruction is clinical and practical throughout. Both are managed by some of the most progressive men in the profession, who give much of their time to the schools. To any one coming to New York to take a graduate course there is indeed a profusion of riches and an array of clinics reaching from Monday morning till Saturday night.

The Health Board has finally settled a question that has long been a perplexing one. Down on the east side of the city is the colony of Polish Jews who have always kept in their houses—contrary to civil sanitary regulations—poultry, to use

for the performance of certain sacrificial rites of a religious nature. The Board has made raid upon raid—arrest after arrest—without more than a temporary abatement of the evil. At last they prepared for a sweeping descent upon the law breakers and were confronted by several wealthy and responsible Hebrews with a proposition to establish a poultry market in that quarter of the city. The only condition attaching to this offer was that the people should be allowed their present privileges till the end of the present month, which is a Jewish festival season. This was acceded to and the question has thus been happily settled. The filth of this section of the city has always given the health officials much trouble and concern.

Yet another new hospital is about to open its doors—the "Gouveneur" Hospital, opposite the foot of the street of that name, and down town very near the East river. It is a city institution, under the control of the Commissioners of Charities and Correction. It is to have an ambulance service, covering the district of the four surrounding police precincts, and will act as a feeder to Bellevue Hospital, just as Chambers Street does to New York. The pressure upon Chambers street Hospital will be somewhat relieved by the new building, as an equitable allotment of precincts has been made to both by the Police Commissioners. That such relief was needed is evidenced by the fact that the latter institution has often had twenty-five ambulance calls daily during the heated term, and as many of these were for cases of sunstroke, the facilities of the hospital were taxed to their utmost.

The new institution is in fact the old Gouveneur market building, remodeled and refitted for its new uses. Its name is that of an old family of high repute in the early annals of New York. It is three stories in height; the first floor is devoted to an accident ward, rooms for ambulance drivers, etc., while above are two small wards on each floor, giving a bed capacity of about twenty-five. This, while small, is sufficient for the purposes of a reception hospital. It will probably be conducted on the plan of the Chambers street hospital. This branch of the old New York hospital, or "House of Relief," as it is officially called, has had a remarkable history. From a small beginning its service has vastly increased until now there is probably no other place in the United States where such opportunities are offered for the study of surgical cases, which alone are treated there. Over two hundred cases are treated daily in the dispensary.

The work of the Summer Sanitary Corps will end in a few days. The city has been surprisingly free from sickness during the past summer, and very few sources of complaint were found.

J. E. W.

ITEMS.

—Bismarck's physician captured his sullen patient, who refused to talk at their first interview, by offering to withdraw and send him a veterinarian. "He will not bore you with questions" quoth Schweninger.

—Bicarbonate of soda is recommended as an abortive in acute tonsillitis. It should be applied in substance.

—The memoirs of the distinguished Russian surgeon Pirogoff are to be prepared for publication.

—A new publication is the Quarterly Bulletin, issued by the New York Post-Graduate School and Hospital.

—Dr. J. J. M. Angear, Professor of the Principles of Medicine in the Chicago College of Physicians and Surgeons, has resigned.

—The local application of equal parts of lactic acid and glycerine is highly recommended for the removal of freckles.

—Dr. Wm. H. Olsten, of Ephraim City, Sanpéte Co., U. T., says: I wish to state in a few words that PAPINE has been thoroughly tested by me and I cheerfully give the following results, viz:

I have used PAPINE in several cases of facial neuralgia, in which I more fully tested its efficiency. It gave a better satisfaction than opium or morphine as well as chloral hydrate. In a case of hepatic calculus it acted like a charm, although it had to be given in rather large doses, and the influence had to be kept up. The above result make it necessary for me to keep it in my office dispensary in future.

—Ergot for Hiccough.—A correspondent in the Lancet calls attention to a new use for an old remedy. A policeman had hiccough which resisted all the ordinary means of relief, and he was passing into collapse, when dram doses of liquid extract of ergot were ordered, with complete relief. Only three or four doses were required. After a period of rest the hiccough returned, but was again stopped by the ergot, and did not reappear.

—At Hoboken, a druggist put up ten grains of morphine in powders instead of quinine as prescribed. The result was the death of two young ladies. The occurrence is the more deplorable on account of the fine reputation of the druggist for conscientiousness and reliability. A daily paper here suggests that coloring might serve to distinguish drugs of such close resemblance.

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TREATMENT OF DIPHTHERIA BY BALSAM OF PERU AND OIL OF TURPENTINE.

Dr. Robert Ofner makes reference in the "Centralblatt fuer die gesammte Therapie" to the treatment of diphtheria with oil of turpentine. (See p. 203 of the current volume of the REVIEW.) He reports sixty cases in which he used the balsam of Peru locally. The balsam was diluted with alcohol and tur pentine added. He claims that application of this mixture with a soft brush will cause the patches to clean off rapidly and reduces the inflammatory condition in three or four days. But two cases of the series died; and that it was genuine diptheria he dealt with is proven by paralysis of deglutition, strabismus, etc., that developed as sequels. Ofner recommends in addition a gargle of chlorate of potassium if the child is old enough to use it. Internally he generally employs the following:

℞ Vitelli ovi. No. i
Aq. dest. qs.
Pv. emulsione.
Ol. Terebinth gtt. decem—2.0 grm.
S. A teaspoonful every two hours.

THE INFLUENCE OF DRUGS ON MILK.

Recently in a medico-legal case the question was submitted to MM. Brouardel and Pouchet, whether an infant of two months came to its death by nursing the milk of the mother, who had been prescribed and was taking arsenic; the mother had on several occasions shown symptoms of intoxication with the arsenic.

The examination of the viscera of the infant showed the presence of at least five milligrams of arsenic, a quantity sufficient to cause death in an infant two months old.

In order to prove that this arsenic could have been introduced by the medium of the mother's milk, M. Brouardel instituted a series of experiments. He gave Fowler's solution with great caution to a number of nursing women and analyzed the lacteal secretion.

The dose administered amounted to twelve drops a day, about six milligrams. At this dose no toxic sign developed in mother or child, still in every case arsenic could be shown present in the milk. In one of the trials it was found that 100 grams of milk contained nearly one milligram of arsenic; this was the case after twelve drops of Fowler's solution had been given for six consecutive days.

The elimination of arsenic by the lacteal glands is therefore certainly proven. And we may conclude that if arsenic is given to such a degree as to intoxicate the mother, her milk may contain quantities of the drug sufficient to cause the death of the nursling. And in all cases when medicine is administered to nursing women, the possible dangers for the infant should be kept in mind. In connection with this report, made to the "Journal de Mèdecine et de Chirurgie Pratiques," we learn of a publication in the "Gazette médicale des Nantes" by M. Lerat, which adduces a number of facts of great interest in this connection.

M. Lerat cites the recent results of Fehling. who found that if two grams of salicylate of soda are given a nurse, the presence of the salt in the urine of the child can be demonstrated after a brief time, especially if the breast be taken an hour or two after the administration. Iodide of potassium shows the same behavior.

Iodoform passes into the milk, even though employed in small doses only. The reaction of iodine can be shown in the urine, even if

the iodoform is only externally used. For this reason iodoform should not be employed as an antiseptic in nursing women.

With regard to the bichloride of mercury the same precaution need not be entertained. Fehling could demonstrate its passage into the urine in animals, but he never found enough mercury to make up the limit of dosage.

The narcotic substances are without effect upon the nursling. The largest doses of opium or chloral administered to the nurse do not bring about any especial symptoms in the child.

Atropine was tried on animals and no dilation of the pupil or other manifestations occur in the suckling, excepting when the maximum therapeutic dose has been exceeded.

Fehling therefore comes to the conclusion that while but few drugs administered to the mother prove deleterious to the infant, a strong exception, however, should be made of those substances that are eliminated with difficulty and accumulate in the organism.

However this may be, the fact remains that intoxication by milk is not of rare occurrence. Lerat calls attention to our "milk sickness" or "trembles" brought on by the milk of cows, after grazing in certain and generally circumscribed pasturages.

Mackey reports cases of diarrhea, vomiting and severe prostration in the crew of an English vessel after drinking the milk of a goat that had fed on a species of euphorbia.

Poisoning may take place by the milk of goats who have grazed where colchicum is abundant. Cazeaux claims that certain purgative drugs given the mother, also purge the child. Such are senna, scammony, rhubarb, etc.

Certain substances have the property of changing the odor and color of the milk of women, of the cow and other animals. Among the former is garlic, which so alters the milk that it is taken with repugnance; again anis, which gives the milk an agreeable aromatic odor, so that the infant seeks the breast with avidity.

According to Dolay the odor of copaiva can be detected in the child's urine, when taken by the nurse; asparagus also communicates its peculiar odor to the urine of the child. Absinth, artichokes, etc., make milk bitter. The action of many drugs as galactogogues is well known.

Sexual Ignorance.—The editor of the British Medical Journal, actuated by the atrocities, the revelation of which have caused such a profound and painful sensation the world over, writes on this difficult educational question with an earnestness that obliges us to quote in extenso. He says: Recent painful disclosures have, among other results, raised an important question, which, in the present state of opinion, can be most readily discussed in the pages of a medical journal. We refer to the complete ignorance regarding the sexual organs and the sexual functions which is permitted, and, indeed, sedulously fostered, by the ordinary education which boys and girls receive in this country. Not merely does our school system provide no information on these topics which so vitally concern the happiness of every individual, but the slightest allusion to the subject is apt to be rigorously prohibited, and perhaps branded as obscenity. The result is, that there is a great deal of ignorance on these questions, and a still greater amount of half knowledge, which is more dangerous than either total ignorance or the fullest information. We have the authority of Sir James Paget for the statement that some men grow up, and even marry, in complete sexual ignorance; and that, while this is rare in the male sex, it is extremely common among cultivated and refined women.

The decent veil which we conspire to throw over everything concerned with the reproductive function serves, beyond doubt, some useful ends, and we trust the English people will always be characterized by their delicacy of thought and expression in this matter. But we are convinced that this secrecy, this conspiracy of silence, has gone too far, and that it is productive of serious evils. We object, in the first place, to it

as unnatural. That our educational methods and social practice should permit men, or more frequently women, to marry without knowing what marriage involves, is not merely unnatural, but may be the cause of much matrimonial unhappiness. Parents and schoolmasters act as if innocence in such matters could last for life, and as if knowledge were a crime.

But a much more serious, because infinitely more common, evil is the objectionable mode in which sexual knowledge generally gets access to the mind. Instead of being conveyed in some plain and matter-of-fact manner, it is too often gained through the corrupting medium of lewd jest or obscene print. At the most emotional and plastic period of life, when new instincts are swelling up and causing great mental disquietude, we withhold from boys and girls the knowledge which nature is instinctively trying to impart, and we leave them to grope their way in darkness, or to seek illumination from some unhallowed source.

Why do the young so often regard an obscene work or print with such fearful but such irresistible curiosity? Not from mere depravity, as we often assume, but because they are thus unconsciously seeking information which they have a right to possess, and which we are conscientiously bound to supply in some form which will enlighten the reason, without inflaming the imagination and exciting the passions. Sexual knowledge is not wrong; its tendency is not necessarily injurious; but our mistaken methods of secrecy have undoubtedly the most unfortunate effect of stimulating the imagination to the highest point. We know the baleful fascination of forbidden fruit, not because it is sweet or pleasant, but simply because it is forbidden. This is a notable trait in human nature; but, in our attitude towards sexual questions, we have disregarded, or rather acted in direct contravention of it. The sexual function is naturally powerful, but we enormously increase its attraction for the young by labelling it as forbidden fruit.

It is usually easier to indicate a disease than to apply a suitable remedy, but we shall not conclude without venturing a few suggestions. First, let us glance at what is suggested in the very few books which touch upon the question. Many urge that parents should convey knowledge on these questions to their children, at the time of life when external signs and new sensations indicate that the sexual instinct is beginning to awake. But many, probably a majority of parents, are not well fitted to undertake such a duty. Our language is badly provided with the necessary terms, and the untrained parent, ignorant of anatomical expression, would find it hard to convey the necessary information without incurring the suspicion and, in his own mind, the reproach of indelicacy.

Some advise that the family medical attendant should act in loco parentis in this matter, but we are certain such action would be highly disagreeable to the members of the profession. One suggestion alone seems to meet the case; but, fortunately, it meets it most thoroughly. Elementary anatomy and physiology should form an integral part of every education. We might begin by teaching boys and girls the bones and skeleton, the functions of the heart, stomach, etc.; and then, when the suitable age arrives, the structure and functions of the sexual organs might be taken as the natural sequel of the previous portions of the course. In this way, the necessary knowledge would enter the mind naturally and simply, with no false shame on the one hand, and no fillip to the imagination on the other. We are confident that an immense reform would thus be easily and quietly effected, and that much evil and suffering would be averted. We should thus convey, in the most natural and unobjectionable form, knowledge which we have no right to withhold; and we should remove the unwholesome fascination which our present habit of secrecy imparts to sexual questions. Certain it is that the stealthy approaches of vice are favored by the existing system.

It will often be found that there is a prevalent opinion that sexual immorality is to

celibates a physical necessity, an attribute of manliness, and even a collateral or prevalent condition of health. This degrading error has been so vigorously denounced by the ablest of modern physiologists, that no one has any longer a pretext for entertaining or promulgating it. It has been the source of much evil, however; and wherever such an opinion is met, it must be energetically denounced.

There is an aspect of the question which cannot be overlooked, especially as recent revelations have thrown a lurid light upon it. It has been abundantly proved that young girls are often entrapped to their ruin in the most utter ignorance of sexual questions, and of the physical significance of the act to which they are enticed. This is surely a lamentable instance of propriety over-reaching itself. Innocent ignorance is always attractive; but, if it be the means of luring the innocent victim to her doom, it is surely more dangerous. How then is the girl, approaching to sexual maturity, to be made acquainted with the solemn facts of creative act, and guarded against associating them with the base impulses of passion? We commend this difficult question to the thoughtful consideration of our readers. In this respect, also, the mothers and the teachers have a very solemn duty; and it is opportune to ask how, when, where, and by whom, it is best performed.

Hard to Kill.—Dr. Richard B. Stewart of Warren, Pa., writes the Medical and Surgical Reporter the following graphic account of a horrible injury and miraculous recovery: On August 10, 1885, I was called on Stone Hill by telephone, to see a dying man. My protestation that I could be of little or no good to a person in that condition proving of no avail, I drove to Stone Hill, nearly five miles from Warren, occupying nearly an hour. Found my man lying by the side of an oil derrick, nearly covered with blood, his head being supported by a companion, who gave me the history of the accident. Henry Sutton, aged 42, and companion, were agitating an oil well, and when Sutton saw oil escaping he told his companion to attend the engine and he would shut off oil. The engine was not stopped soon enough, as the polishing rod rope was snapped off in the crown pulley, and while Sutton was turning off the stop-cock, using his right hand, and leaning his body over towards his left to escape the jet of oil, the polishing rod (an iron bar 20 feet long, ¾ of an inch in diameter, and blunt at both ends,) came down from top of derrick 74 feet high, and struck Sutton one and one-half inches back of and two and one-half inches below right ear, passing under the sterno-cleido-mastoid muscle, and obliquely across the neck to the front, striking the manubrium on its under surface, and crossing over struck the cartilages of first two ribs, nearly if not quite separating them from sternum, came out of chest one-half inch below and one inch to the right of nipple of the left breast, struck the left thigh six inches below the anterior superior spine of ilium over the rectus femoris muscle, which it penetrated, and came out at the lower and outside of thigh five inches from external tuberosity of femur, penetrating ground about five inches. Five feet eleven inches of rod passed through neck and chest. Entrance to exit of chest wounds measures sixteen inches, and thigh wounds eleven inches apart. I made a stretcher out of two-inch boards (stretcher weighing more than the man did), and with the help of four men carried him down the mountains nearly a mile to nearest house, where his clothing was removed and his wounds antiseptically dressed, and liberal doses of brandy and morphia were administered, hot bottles placed around him and used active measures to get him over shock. He rallied, and maintained he was going to get well, and would not talk of dying. The first two days after injury he suffered intense agony at every attempt at swallowing. For three days I thought he would die from inflammation of the left lung. Every cough, though under the influence of morphia, seemed to pain him intensely. On the sixth day after injury his temperature was normal, and pulse 78 beats per minute. Temperature and pulse have remained normal ever since, and

yesterday, the 25th, he was sitting up with all the indications of gaining strength rapidly. Now when I hear of the case recorded in Dalton's Physiology, of the man with a crowbar through his brain, I will relate how a man with luck and pluck escaped with his life from equally as wonderful an injury.

Chronic Alcoholism.—According to the British Medical Journal, Messrs. Dujardin-Beaumetz and Audigé have communicated to the institute the result of their researches on chronic alcoholism. From June 1879 to July 1883, 18 pigs were experimented upon, each of them with a different sort of alcohol, such as ethylic and methylic alcohol, alcohol prepared from corn, beet-root, and potatoes (pure and impure), absinthe, and tincture of absinthium. These were given daily with the food, in the dose of one to one and a half grams of alcohol, two grams of absinthe, and two centigrams of tinctura absinthii for one kilogram of the weight of the body. The symptoms of intoxication by alcohol were sleepiness and prostration, vomiting of bile and glairy mucus, diarrhea, and sometimes intestinal hemorrhage, dyspnea, tremor, and incomplete paralysis of the hind legs. Some animals which were killed or died during the experiment were examined by Professor Cornil. He found congestion of the digestive tube, sometimes causing hemorrhage; congestion and inflammation of the liver, but without cirrhosis; congestion of the lungs; and, finally, atheroma of the large blood-vessels, especially the aorta. The animals were not emaciated, but presented numerous extravasations of blood into the subcutaneous and muscular tissues. Impure alcohol had a much more rapid and deleterious influence than rectified alcohol. The symptoms caused by absinthe and tinctura absinthii were excitement, and spasmodic contractions of the muscles and cutaneous hyperesthesia, but true epilepsy was never noticed.

The Treatment of Hemorrhoids by Injection.—In an instructive clinical paper in the July number of The American Journal of the Medical Sciences, Dr. Charles B. Kelsey, of New York, urges the treatment of hemorrhoids by injection of carbolic acid. After an ample experience this has become his routine practice, and in all his cases he has never known a patient to abandon the treatment after it was begun, and he has never failed to effect a perfectly satisfactory cure by it, and he has never had an accident of serious nature with it. He uses three solutions, one of fifteen per cent., one of thirty-three per cent., one of fifty per cent., and sometimes he uses the pure acid. In a severe case he begins with the stronger ones, in a mild case with the weaker.

Buried Sutures.—On page 366, Vol. xi, Review reference was made to the use of buried sutures in plastic operations.

Mr. C. B. Keetley describes under this head, in the British Medical Journal, sutures which are completely covered by the skin, and do not involve that structure at all; they are strongly recommended to be used in all operations in which deep structures are involved, and where rapid union is required. The use of these sutures enables operations such as excision of the hip to be performed without the use of drainage-tubes in the after-treatment of the wound. The method of applying these deep sutures is thus explained by the author. Suppose an operation to be performed with the object of uniting the two ends of a deep nerve that has been divided. After the ends of the nerve have been united, whatever muscles or aponeuroses had been divided in cutting down upon the nerve would be restored to their original relationships, and kept there by aseptic animal sutures; then the wound in the deep fascia must be separately sewn up, and finally the wound in the skin must be closed with catgut, or silver, or whatever is preferred. The results to be expected from this method of procedure are these:

1. There is no need for drainage-tubes.
2. The sutured muscles and aponeuroses are eventually restored as regards functions.
3. Deep, rough and depressed cicatrices are avoided.

4. Necrosis of bone and sloughing of soft tissues are avoided.

The author also states that he has found these sutures very successful in dealing with sebaceous cysts of the head. Having dissected out three from the scalp of a gentleman, the remaining cavities were obliterated by two sutures in each, passing them well through the floor of each small wound. No cutaneous sutures were used at all; the skin-wounds did not gape. A little salicylic acid dissolved in ether, and a little powdered salicylic acid, were placed over the wound. The patient went about his usual business, and a fortnight afterwards the scab was removed, leaving three sound linear cicatrices.

The International Medical Congress.—The New York Medical Journal, which, together with the most influential medical journals of the country, takes a very decided attitude against the "New Committee" of the American Medical Association, writes in its issue of September 26, on the present status of affairs, as follows:

We are close upon the termination of the period of thirty days that the New York meeting of the American Medical Association's committee laid down as the time within which it would receive back into the fold any of the gentlemen who had declined to figure in its organization of the International Medical Congress, but who might be willing to withdraw their declinations. In the course of a week from now the period alluded to will have all but expired. So far as we know, only one person has seen fit to respond to the committee's overtures, while, on the other hand, the work of declination is steadily going on, and, as will be seen by announcements elsewhere in this issue, has been taken part in latterly by some of those to whose continued support the committee must have attached the utmost importance, and upon which it must have counted quite confidently. Not only has the committee thus signally failed to recall those who declined to share its fortunes, and to prevent others from joining them, but it is plainly evident from the expressions made use of in the committee's official report of its proceedings that it has at last come to recognize the fact that it must proceed with great caution in the work of making appointments, lest it may appoint gentlemen only to find them declining at the earliest oportunity.

It is manifest, therefore, that the committee has utterly failed to repair in any degree the breach of concord which its creation precipitated upon the American profession, and which, in the view of the great majority of well-informed and fair-minded men, has entirely done away with the possibility of a successful meeting of the Congress in this country in 1887. It was not to be expected that the committee would be able, even if it was willing, to take measures calculated to restore the harmony necessary to success; for it could not, of course, go counter to the implied instructions under which it acted. Having done its best to carry out those instructions at its Chicago meeting, it might at one time, when its efforts were first shown to have demonstrated the impracticability of reconciling the American Medical Association's usurpation with the posibility of a successful meeting of the Congress, have gracefully declined to proceed further in its thankless task. Instead of doing so, it chose to indulge in further attempts to accomplish the impossible, and it also took occasion—or occasion has been taken in its behalf—to inform the profession that its (the committee's) course was in no sense a compromise. Compromise it certainly was not, nor was it in any way conciliatory. As the committee, therefore, has no disposition to conciliation, it is useless to expect now that it will under any circumstances admit that its creation was detrimental to the proposed Washington meeting of the Congress. The question arises, then, whether it is incumbent upon the officials of the Congress to wait much longer before withdrawing the acceptance of the American invitation. Our own conviction is, that both the interests of the Congress and those of the American profession would be decidedly furthered by prompt action on the part of our European colleagues.

Diagnosis Between Indurated Chancre and Herpes.—We read in the Practitioner: It sometimes happens that herpes of the penis presents itself under the form of a single patch of superficial ulceration, accompanied by some induration of the underlying tissues; there may be also a swelling of the inguinal glands, so that the diagnosis between this so-called chancriform herpes and some forms of indurated chancre is very difficult in the early stages. M. Leloir, however, calls attention (Journ. de Connaiss. Mèd., April 2, 1885) to the fact that when a herpetic ulcer is pressed between the fingers, a drop of serous fluid is squeezed out. This manipulation can be repeated several times with the same effect; in the case of chancre, on the contrary, a little fluid is seen on the surface, but the quantity is not increased by pressure. When the base of the herpetic ulcer is indurated, the hardened tissues can be flattened between the fingers, while in chancre no amount of pressure can change the shape of the nodule. This difference is explained by the fact that in herpes there is localized edema of the tissues, while in chancre the chief lesion is a hard infiltration, sometimes accompanied by sclerosis of the connective tissue and of the vessels.

Explosive Physic.—The British Medical Journal says: A list has just been published in the Union Pharmaceutique, of accidents which have recently occurred during the preparation or carriage of explosive substances used in medicine. At Strassburg, a chemist's assistant was changing some lycopodium powder from one bottle to another; the particles that escaped mixed with the air, a jet of gas was burning, and a slight explosion occurred. The frightened assistant dropped the jar containing the lycopodium, the room was at once filled with the powder, and a violent explo sion took place. Chlorate and permanganate of potash are also dangerous. M. Meyet has stated that a tooth powder composed of chlorate of potash and cachou has been known to explode in the mouth of a person engaged in brushing his teeth. A druggist who dried some hypophosphate of lime in a receptacle containing sand was killed by its explosion. Oxalate and citrate of lime are also explosive, but only at a high temperature. Pills of permanganate have been known to explode spontaneously. A mixture of perchloride of iron and glycerine exploded in the pocket of a patient who carried it. An eminent chemist at Paris prepared ozone with powders composed of equal parts of peroxide of manganese, permanganate of potassium, and pulverized oxalic acid. He took every recognized precaution, and the mixture was corked up in a bottle; a few minutes afterwards an explosion took place, aud the bottle was reduced to atoms.

Removal of Tonsils.—The Medical Times, according to the Canada Lancet, writes: Dr. De Saint-Germain gave some very practical remarks on this common operation that we are so often called upon to perform in the winter season. He said, "You noticed that I just refused, notwithstanding the entreaties of the parents, to perform the operation of extirpation of the tonsils in this child, although I performed it in two others. The fact is that this simple operation is not without danger in certain cases. How shall we know when not to operate? Well, there is a rule that you should never forget; it is never to cut the tonsils until they touch each other in the median line. It has been said that a child that has enlarged tonsils is subject to phthisis or to get diphtheria, but it is not true; large tonsils don't exercise such an influence over the general health. There are cases when you should refuse to operate. When you see the mucous membrane inflamed, and you see white spots, don't operate; wait, and under treatment it will regain its usual rosy color. Ought the tonsils to be cut at all ages? No. If the child is under two, wait, for fear that a loss of blood, however slight, may weaken the patient. From four years of age up to twelve is the period for operating. At twelve, if it is a girl, wait, for very often at this period or later menstruation may come on, and it will modify the condition so that no operation

will be needed. From seventeen to nineteen, and in adults, hemorrhage may be feared. Here always remain at least an hour with them after the operation. As a last counsel, don't operate at all when there is an epidemic of diphtheria. Having decided to operate, what are the means used to perform the operation? All of you know the amygdalotome, so I won't describe it. I wish to say that I think it will pare or scrape the tonsil, but it will not extirpate it, so that some other doctor has often to be called in to complete the operation that you have left unfinished. It is besides an instrument that is difficult to keep clean. and I have seen the knife-edge break off and fall into the pharynx, so that I do not use this instrument at all. I use concave bistouries. The convex side is put against the adherent portion of the tonsil, and the concave side is towards the base of the tongue. Right and left instruments are used. With these instruments you can pluck the gland out of its socket completely, but you need a special pair of forceps. These are long pincers, made so that they will not tear the substance, with triangular teeth that are flat, with a sort of gutter between, exactly like a small waffle iron, from which you have so often enjoyed eating the cakes. Place the pincers horizontally, and the child will instinctively open its mouth wide, so that nothing remains but to cut the tonsil.

Traumatic Urethral Stricture Cured by Excision.—Dr. Robson, in the British Medical Journal, (Cincinnati Lancet and Clinic), reports a case of traumatic urethral stricture cured by excision. Concerning such operations he says:

All narrow strictures of the urethra may be cured by excision if situated anterior to a point half an inch in front of the membranous urethra; easily if behind the scrotum; without much difficulty if covered by the scrotum, or even if penile.

While formulating such a rule, I would have it understood that I do not advise or practice excision of the stricture unless it did not yield readily to the ordinary forms of treatment, or rapidly relapsed into its old condition.

The preceeding indications obtained in a case under Dr. Robinson's care, the operation was decided on and performed as follows:

The man was etherized and placed in the lithotomy position, when Mr. Wheelhouse's staff was passed down to the stricture, the scrotum held up, and the urethra laid open for half an inch in front of the stricture, which was carefully divided and the urethra laid open for half an inch beyond this. The stricture being thus fully exposed, was found to consist of a fibrous cicatricial band about one fourth of an inch wide, involving mucous membrane, sub mucous tissue and bulb tissue. The whole of the mucous membrane was excised, and the cut ends of the mucous membrane were drawn together over the gap thus formed and secured by a continuous catgut suture; a catheter then being passed into the bladder, the vertical incision into the urethra was united by catgut, thus closing the canal, and leaving a continuous and closed urethra. The last sutures were an afterthought, and perhaps unnecessary, for they gave way on the second day, and the urine partly escaped for some little time by the perineal wound, which healed by granulation, as in the ordinary boutonniere operation. For the first two days after operation the temperature reached 101°, but was afterwards normal.

Concerning the operation, Dr. Robson remarks: I was astonished to find how very easily the mucous membrane could be made to cover the gap without any tension, evidently due to the abundant sub-mucous tissue, allowing the membrane to slide freely over to the subjacent tissues. I feel sure it would be quite easy to cover a space of one-half to three-quarters of an inch. The result in this case would seem to prove that the vertical slit may be safely left to close by granulation; and this may probably be better than absolutely closing the whole canal and so preventing drainage.

The result has almost exceeded expectation, as I thought there might be a tendency to relapse; but since a No. 13 sound will pass

through without a hitch six months after operation, I think we may conclude that a genuine cure has been effected.

CONTRIBUTION.

THE RELATION OF MIND TO MATTER

BY AMOS SAWYER, M. D., HILLSBORO, ILL.

[Read at the Meeting of the Mississippi Valley Medical Society, Evansville, Ind., Sept., 1885.]

It is an evident fact that the "Theory of Materialism" is, at the present day, among educated people, the popular one, but when, if it has not already reached its flow, the ebb sets in, it will be discovered that the members of the medical profession have in no small degree been responsible for its dissemination, as their preparatory studies necessitate the investigation of matter and its properties, and in the pursuit of this knowledge they lose sight of the fact that there is something immaterial in man and that some of his acts are free. The same cause exists in all the branches of science, producing like effects, consequently scientific men are largely in the majority in the materialistic ranks, with the medical profession well represented, and this in the face of the fact that every practitioner of medicine admits that in numerous instances he recognizes the necessity for the treatment of the mind (whatever he may mean by the word) more than the body; as well as the fact to prove a success he must in every case make use of a mental tonic—in other words, by word and act inspire confidence in his ability to cure the patient. Miller said: "I abandoned surgery for philosophy and poetry because I found that the wounds of the spirit were so much greater and numerous than those of the flesh. The confidence with which the patient turns to his physician with almost every thought, places him in a position next to God, and therefore the expression of an opinion carries with it a weight second to none; hence the relation is a responsible one.

The object I have in view is to attempt to prove that freedom of volition does exist, and that it is incompatible with matter. That man's actions prove that he is not all matter, for in some of them he chooses, and therefore is free. That the molecules of matter remain as they were created, unbroken and unworn. If I fail to make clear the position I have assumed, if my reasoning is defective, yet if it only awakes in the mind of one in this audience a train of thought that will enable him to clear away the cloud which prevents so many from distinguishing the material from the immaterial, the mind as something distinct from matter, though so intimately blended with it, I shall feel amply rewarded for my efforts, feeble though they be.

Mind and matter are the two factors of the Universe. Mind produces; matter is the product. And here perhaps it will be proper to explain what I mean when I make use of the terms matter, a simple being, and spiritual being. Matter has weight and occupies space to the exclusion of other matter. It exists in three forms, solid, liquid and aeriform, and may be simple or compound. A simple being is not matter but dependent upon matter, and therefore is material, as light, heat, and electricity—forces in a body. A spiritual being is independent of, though incased in matter, and has an extrinsic dependency on matter because it depends upon the nervous system for the report of sensations, and depends upon the body for its compound life with the body, and God does not create it except in a body. Such an entity is spiritual, is immaterial. The light and heat of the sun is represented when wood or coal is consumed and the force thus generated is that conserved in its formation, and clearly demonstrates that matter is dominated by a simple being (force); it is the spirit of an otherwise motionless mass.

In a lecture on molecules delivered before the British Association at Bradford, by Prof. Clark Maxwell, F. R. S., published in the London Nature, Sept 25, he says: "The molecule, though indestructible, is not a hard rigid body, but is capable of internal movements, and when these are excited, it emits rays, the wave lengths of which is a measure for the time of the vibration of a molecule. By means of the spectroscope the wave lengths of the different kinds of light may be compared to within one-ten-thousandth part. In this way it has been ascertained, not only that molecules taken from every specimen of hydrogen in our laboratories have the same set of periods of vibration, but that light having the same set of periods of vibration is emitted from the sun and fixed stars. We are thus assured that molecules of the same nature as those of our hydrogen exist in those distant regions, or at least did exist when the light by which we see them was emitted. Light, which to us is the sole evidence of the existence of these distant worlds, tells us also that each one of them is built of molecules of the same kind as those we find on earth. A molecule of hydrogen, for example, whether in Sirius or Arcturas, executes its vibration in exactly the same time. Each molecule, therefore, throughout the Universe, bears impress on it of the stamp of a metric

system as distinctly as does the metre of the Archives of Paris, or the double royal cubic of Karnae. No theory of evolution can be formed to account for the similarity of molecules, for evolution necessarily implies continuous change, and the molecule is incapable of growth or decay, of generation or destruction. None of the processes of matter, since the time when nature began, have produced the slightest difference in the properties of any molecule. We are therefore unable to ascribe either the existence of the molecules or the identity of their properties to the operation of any of the causes which we call natural. On the other hand, the exact quality of each molecule to all others of the same kind gives it, as Sir John Herschel has well said, the esssential character of a manufactured article, and precludes the idea of its being eternal and self-existent. Thus we have been led along a strictly scientific path very near to the point where science must stop. Not that science is debarred from studying the internal mechanism of a molecule which we cannot take to pieces, any more than from investigating an organism which she cannot put together. But in tracing back the history of matter science is arrested when she assures herself on the one hand that the molecule has been made, and on the other that it has not been made by any of the processes we call natural. Science is incompetent to reason upon the creation of matter itself out of nothing, though it furnishes the philosopher with all the materials of such reasoning. We have reached the utmost limit of our thinking faculties when we have admitted that, because matter cannot be eternal and self-existent, it must have been created. That matter, as such, should have certain fundamental properties, that it should exist in space and be capable of motion, that its motion should be persistent, and so on, are truths which may, for anything we know, be of a kind metaphysicians call necessary. We may use our knowledge of such truths for the purpose of deduction, but we have no data for speculating as to their origin. But that there should be exactly so much matter and no more in every molecule of hydrogen is a fact of a very different order. Natural causes, as we know, are at work which tend to modify, if at length they do not destroy all the arrangements, and dimensions of the earth and solar system. But though in course of ages catastrophies have occurred and may yet occur in the heavens; though ancient systems may be dissolved, and new systems evolved out of their ruins, the molecules out of which these systems are built, the foundation stones of the material universe remain unbroken and unworn. They continue to this day as they were created, perfect in number and measure and weight, and from the inneffaceable characters impressed on them we may learn that those aspirations after accuracy in measurement, truth in statement, and justice in action, which we reckon among the noblest attributes as men, are ours because they are essential constituents of the image of Him who, in the beginning, created not only the heavens and earth, but the materials of which heaven and earth consist." And here, I think, he proves conclusively, that as molecules of matter have not, and cannot change, they must have been created.

Can any man with a healthy brain of not less than 34 ounces believe that this world was formed, placed in position amongst the planets and revolves on its axis by chance? For if he admits that it is governed by certain laws, then he concedes that it is controlled by something superior to matter. Ingersoll thought that he had made a point (and it was above his average) when he denied that matter was subject to laws; he says that they are merely "consequences." But this is only another name for the same phenomena, as law is merely the regular method by which certain phenomena or effects (consequences) must and do follow certain causes—as astronomical, geological, chemical, etc. In other words, law or consequences, if you please to so term it, depends upon two parties or conditions—a superior imposing and an inferior obeying it.

The materialists declare that there is nothing immaterial in man, that all our acts are necessitated and fated; in other words, we do only what we are obliged to do. What then is that mysterious life or entity created only in a body and which manifests itself in memory, gratitude, love, hate and pride, and the belief in a life beyond the grave, if not something immaterial—spiritual? That we are free, we know, for it is a fact of consciousness; human accountability rests on this truth; all laws are based upon it, from those governing the savage tribes to the most civilized nations; for there can be neither reward nor punishment, vice nor virtue where there is no freedom of action. Convince a jury that a man's actions are not free, and conviction is impossible. But apart from this and that inward spiritual speech which alone greets the marvel of creative love—man—and which prompts him to do good and shun evil, and out of the wreck of every earthly hope bids him trust in that unseen creative power

for rest in the realms above, there is other evidence, inexplicable save by the admission of the existence of something not matter controlling our actions. Localized cerebration has been advanced as an unanswerable argument in favor of the materialistic theory; the seat of intelligence having been demonstrated to exist in the anterior and posterior convolutions of the cerebrum, and that memory is located in the fissure of Sylvius, near the Island of Reil. But is it memory? No! it is merely that portion of the brain where the mind receives, communicates and expresses the recollections and opinions of subjects and objects; in other words, by certain nervous combinations it reproduces at this spot impressions received. But if I am wrong and memory is merely the substance of the brain, how is it that in old age, when since youth the gray and white matter have been frequently renewed, that we can retain the memory of childhood years? Is it written there as upon parchment by neuro-electrotype process? What a mental cyclone there must have been among the atoms of gray matter if Herbert Spencer's theory is correct; and fearfully dangerous commotion in the necessarily rapid movements of mind-cells according to Haeckel's idea of cerebration, when Mithridates, King of Pontus, was calling each of his 80,000 soldiers by name. Scipio knew all the inhabitants of Rome. George III, never forgot a face that he had once seen, or a name that he had once heard. Lord Granville could repeat, from beginning to end, the New Testament in the original Greek. Bossuet could repeat the whole Bible, all of Homer, Horace, Virgil and many other works. These are a few instances only of remarkable memories, where it must have required an immense cerebral storage capacity. Can the substance of the brain store a lifetimes experience and reproduce it at will? But stop! The will of what? It must be something superior to, as it controls, matter. When we read something ludicrous, the mere sight or sound of the words (actions of matter) do not cause us to laugh, but it is the ideational change developed in something apart from matter that affects the risibilities, for if this act was merely mechanical, then every normal cerebral mass, subjected to the same sight or sound (cause), should induce the same effect, (consequence); but the fact that it does not, but frequently the opposite, excludes such an hypothesis. The same rule applies to all our emotions.

Why is it that we may become so accustomed to the striking of a clock as to become unconscious of its presence if the impressions are made only on matter? For the vibrations of the air were transmitted to the delicate membrane of the ear as usual, and from thence to the brain by the natural mechanical and neurotic process; not a sound escapes it, consequently if only matter takes cognizance of sound, then as it did make an impression on the substance of the brain it should have recognized the sound when it struck the nerve; but the fact that it did not proves that the cognition or intelligence is not composed of matter, but is distinct from it.

I am aware that some materialists claim that the recollection of past events is merely setting in motion again the molecules of gray matter, or, as Haeckel expresses it (vol. I. p. 127), "the mind cells which possess the capacity to feel, to act, to think," which originally produced the perception. (Query: what is that capacity? Evidently, it is something superior to and distinct from the cell it controls.) But if their theory is true, I ask, what controls and what sets these cells in motion again? That we possess this power every intelligent person must be conscious; the loss of it is insanity to that degree. Why is it that two persons, after viewing a subject or object arrive at different conclusions? Or why, by evidence or reasoning, change them if the impressions made are simply movements or arrangements of the mind cells, or impressions on the substance of the brain? What has the power to effect the re-arrangement of the brain substance and adjust the cells so as to form the new impression? Surely this is only another name for that intelligence which we call spiritual. If not, then the darkness is simply intensified by this kind of an explanation. It is strange how differently the cells arrange themselves after viewing the same subject or object in an educated or ignorant person, or even in two persons of equal mental calibre. The school-boy, when he has imperfect lessons, is not to blame; it is merely the wrong arrangement of the mind cells, or the loss of force to call up the right ones; though it is wonderful to see the effect produced no them by corporal punishment, for after a thorough administration of this remedy we usually find them in their proper position at the next recitation. We may be in doubt which of two ways is the correct one to spell a word, but by writing it we can, from appearance, quickly decide which is right. Now as there must have been in this case two different arrangements of mind cells, what was it decided the question? We may recall some passage or verse committed to memory years ago, and although we can repeat it word for

word, a doubt often arises as to its correctness which can only be removed by reference to the original. Now, what was it caused this feeling of doubt? It could not have been the mind cells, for they were arranged right, and if they "think" must have known it. Why do we then, if this theory is true, condemn defaulters, murderers, thieves, et al. It was merely the wrong arrangement of the mind cells which impelled them to commit the act, though most of them will admit that had they heeded that monitory voice, that force, that capacity, that something not matter, which warns us as we walk, and rebukes us when we stray, they would not have fallen. No, we do not inflict punishment upon machines, as this theory makes us out to be, but upon hearts, souls, characters, when they have proved false to their Creator, to their fellow-men and to themselves by the violation of the law which the natural exercise of their free will would have prevented. Dr. Zukertort, the chess-player, says, in explaining how he is able to play several games at the same time without seeing the board: "I have a way of photographing a board in my mind, and the board being numbered, when one board is called the photograph of the position of the men on the board comes instantly before my mind, while the last board disappears. I never see two boards before me for a single instant." Now, what is the power, controlling the force by which this mind-cell shuttle is moved back and forth to the fissure of Sylvius in its proper time and place, if not something superior to and apart from matter? For if force acted alone on matter, the boards would reappear in the inverse order of their formation, six, five, four, etc., but the fact that they come as called, one and five, three and six, is conclusive evidence that the simple being (force) is controlled by an intelligent creative power superior to it which we call mind (a spiritual being). The truth is, that in their attempts to explain these and kindred phenomena, materialists attribute to laws and actions of matter what in reality are due to actions and laws of spirit. That successful physicians, generals, merchant-princes, railroad kings and landed aristocrats must possess similar powers evidenced by Dr. Zukertort in the game of chess, there can be no doubt; but if this phenomenon is due alone to the action of matter, then as the quantity and quality of brain substance used in cerebration in these cases must be about the same, they should be able to change positions with each other with equal success; just as a car constructed to carry ten tons of freight will transport with equal ease and safety that weight of corn, coal or any other substance; but that this is not the case with the brain we have convincing proof in the numerous individual instances we can all recall. This demonstrates that the human brain in cerebration is controlled by a spiritual being acting through a material substance, and that it is this and not matter that chooses that which is agreeable and suitable for its development, for when this spiritual desire is disregarded, failure inevitably follows. If the brain is perfect in quantity, quality and construction, the psychical endosmose and exosmose emanating through such an instrument, with proper advantages, will place its possessor among the conceptive and accomplished of his day. Webster's brain would not have varied a single iota in weight or appearance had he remained an ignorant country farmer, but had that spiritual body (mind) which marks out the path for and urges us to follow through life, prompted him to become a chemist, an astronomer or a geologist, there is little doubt but that he would have become as renowned in that branch of science as he did as a jurist and a statesman. We would not expect a man to make lumber with a hand-saw, or think of blaming the engineer because he could not make his engine draw 300 tons, when its traction power was only that of 150. It is exactly so with the mind in its relation to the brain. In other words, the relation, as it appears to me, between mind and matter, is not unlike, in some respects, that of a telegraph operator to his instruments.

The mind is the operator, the nerves the wires, the different portions of the brain the instruments connected with the five stations, sight, hearing, smelling, sensation and speech; when, therefore, the mind is busily engaged with an instrument, we can easily see how it would fail to respond to a communication from another at the same moment; hence, we do not recognize familiar sounds when intently looking at an object, absorbed in thought or intent upon some piece of work, as we surely would do were the impression made merely upon matter. And right here I assert that there is no such condition as a diseased mind, and on this point there certainly can be no disagreement, as our opponents must account for this condition by the operation of physical laws upon matter; and with their hypothesis of the process of cerebration, we are warranted in presuming that this was induced by the impairment or destruction of mind cells or matter by disease or age, thereby producing a confusion of ideas or loss of memory. Now, if this is the case, then it is reasonable to suppose that the oldest cells would be first

to suffer; but as old people recall events which have transpired in their youth much more readily than those of old age, this sets up a barrier to any explanation in this direction, and excludes materialism from the field. I claim that insanity is the result of wrong impressions received when the force which induces them is increased or decreased (excitement or depression, the consequence of every deviation from the normal standard of health) by any cause from the natural pressure, just as the transmission of a correct message depends upon the perfect working condition of instrument, wires and battery, or, to coin a word, there must be no electroses; and just as the operator of a disabled line will make the most serious blunders and laughable mistakes, just so, and for the same reason, the mind, working in response to the character of the impressions received, as witnessed in the hallucinations of the insane, which to them are as real as if they actually transpired, causes its servant to become dangerous or harmless, as the case may be. Taking this view of the subject, I claim that when from overwork, sickness or any other cause, we feel an indisposition or an incapacity to think or control our thoughts, when we desire to do right, such a condition is a temporary insanity from loss, so to speak, of battery-fluid. That the recovery of the insane depends upon the character of the physical loss sustained, few, I think, will deny, for when that loss is not repaired, the mind is ever ready to take up the tune where disease broke off the strain.

The materialists assert, in proof of their theory, that we have no cognition except such as are afforded us by our sensations, but that we cannot rely on our sensations because the object may not be as our sensations perceive it to be. What, then, do we know? Only that we are, and that we feel something; hence, we can never know what we are, or what we feel. That this reasoning is false we must all acknowledge. To illustrate: If marble, or substances possessing similar properties, be brought in contact with the skin, the impression conveyed to the senses and the sensational understanding is, that they must be colder than other substances, such as wood, etc.; and this impression would remain was there not a power apart from, and controlling, matter, which, regardless of the sensation, informs us that the coldness is illusive, and due to its greater capacity for the absorption of heat. They admit that the order of nature is most admirable, but attribute all this to chance, not design. Show them an arrow head, or hatchet, a spear point constructed from flint, and they will exclaim, behold the work of man's hand! These were designed for weapons. Call their attention to a group of peculiar shaped mounds, and ask were these not formed by an aqueous agency? They will reply, no, they are the work of man; a race more intelligent than our Indians, as evidenced by the utensils and implements deposited therein. In the Meramec valley, near St. Louis, Mo., there were discovered a number of little mounds, each one containing what was supposed to be a tomb, as the interior was constructed of stone set endwise on the sides and ends, and the top and bottom covered with the same material, all being about the same size. Now, although not a bone or a vestige of anything which they could offer as proof in favor of their theory could be found, yet, as in previous cases, and contrary to the cardinal rule, that science deals with facts and that belief is no good, a party of scientists decided that these stone boxes had been used as receptacles for the dead, by some extinct race of people. Yet these same men profess to see no design in the admirable order which prevails in nature, and in the most earnest manner declare that to have recourse to an invisible power to explain the phenomena of nature is unscientific; for "science deals with facts. Scientists must know. Belief is no good." Ask them to explain the phenomena of light, heat and electricity, and they will do so by calling them forces, something in a body which they know to exist from the effects only. Yet it is not deemed unscientific to treat of their existence. Then to be logical, they must admit that the same rule applied to all things must lead to a belief in an invisible first cause—a Creator of the universe. But then they assert that the elements of matter are self-existing, therefore it must be independent as it has within itself all that is necessary both for being and action. It cannot change, because anything which is subject to change must have had a beginning, and consequently cannot be self-existing. This, as Prof. Maxwell has clearly shown, is one of the very best reasons that could be advanced to prove that they must have been created. But are the elements of nature independent? No, they depend one upon another. The elements of matter are numbered, and each one possesses its own shape, size, weight, and combination with other elements; therefore it must be finite, for its action is limited and determined, all of which is incompatible with the infinite. Consequently, matter is contingent and depends upon the will of its Creator.

An evidence that is inexplicable save by

the admission that the brain of man is dominated in its voluntary action by something not matter, is afforded us in traumatic pressure of the brain, for we find after a long interval of insensibility the mind at once resumes its functions when the obstruction which prevented the machine (brain) from working is removed. Some twenty five years ago, Dr. Brainard, of Chicago, Ill., removed a depressed bone from the head of a sailor who twelve months previous had fallen from the rigging of a schooner and remained insensible up to that time; the moment the pressure was removed the mind gave proof of its readiness for action by recalling the event, although the past year was a blank in his life. Another illustration still more remarkable occurred in Maine. The son of a miller whilst standing on the side of a mill pond, at a banter from his father, who was on the other side, shot at a snipe standing on a rock in the middle of the pond. The ball missed the bird, and glancing from the stone struck his father in the forehead. He remained in an insensible condition for nearly two years, when a depressed bone was removed, and the mind, taking up the thread where it had been so suddenly broken, exclaimed, "Zeeke, you dog, you missed it;" thus proving that in the almost imperceptible interval between the shot and the reception of the injury, the mind had mirrored to it the fact that the bird was unhurt, and had framed an answer for delivery. Force alone could act so instantaneously, but neither force nor matter, alone or combined, could retain the knowledge of the event for such a length of time. Another evidence afforded us, and I presume you all can recall similar instances, is that of the dying. To illustrate, I will mention one circumstance which made a deep impression on my mind; and this is but one of many others. My brother's oldest boy was born the night my father died. Six years thereafter the boy died. On the night of his death he looked into a dark hall and said, "Father! who is that?" All present looked in the direction that he pointed, but there was not any one to be seen. His father replied, "Willie, there is not any one there." "Yes there is, father, it is grandpa Sawyer, he is holding out his hands, don't let him take me!" threw his arms around his father's neck and died. That he really saw his grandfather I firmly believe, because in one so young it could not have been a hallucination.

There is something created for and abiding within us that if it remains a hundred years will present a certain form common to the race and peculiar to the individual. But let this spiritual being created for matter depart, and in a few hours that material habitation it occupied for a century becomes a mass of corruption, thus proving that the human form depends upon the immaterial. The body is merely the instrument by which we act upon the material world. How frequently do we hear of the sudden death of a person in apparent health, produced by fright or some great calamity. Surely this would not have been brought about by the action of matter, for molecular life was perfect up to the time when that something which energizes and vitalizes the chemical combination to which it first gave birth took its flight. It was not through loss of nerve power or force, for this was sufficient up to the moment of death, as evidenced by the fact that they were in perfect health. It must be that this mysterious life that controls the vital forces, crushed and overwhelmed as if shocked by a spirit-battery, refuses longer to work the machine in which it was enshrined, and, dropping the cumbrous fetters, the bright spirit wings its way to heaven. Again, there are individual instances where the heart's deepest affection centered around some loved one whom the pitying angel relieved from life's weary load, refusing to, or incapable of banishing the image from their heart, or being reconciled to their loss, with anguish wrung or madness wild, prematurely end their life in the asylum or the grave. Is this merely the action of electricity? Of nerve force? Of matter? No! They feel; they believe! There is an inward spiritual speech which assures them that in a heavenly town their lost loved one will be found again. Therefore, I say all the evidence points to something not electricity, not nerve force, not matter, controlling our voluntary actions, and that in exceptional cases this psychical force evidences its separate existence by its power to project itself beyond and independent of the matter of which it forms that important part which should command the respect and admiration of all with whom it comes in contact, for it is the immaterial something that makes the man.

That the leading materialists have discovered that whereas, under a delusive phantom, they supposed that they represented the skirmish line in psychological research, they were in truth and in fact merely camp followers, is evident, inasmuch as they have now joined the Christian army in their cry: "Behold the Great Unknown and Unknowable; the Creator of the Universe!" and admitting that there is no such thing as the annihilation of matter, conclude that the same law must

apply to the immaterial. But their shallow-brained, unscientific, bushwhacking followers, like the mob that only await a leader to start them on their wild career of destruction, keep on, spurned up by the Ingersoll whose only claim to the position is a God-given oratory.

Dr. John W. Draper, of New York, when speaking of Prof. Huxley and Dr. Tyndall, said: "The former came to this country by the advice of his physician to save the last remnant of an exhausted brain, and his lectures were as feeble and decrepid as the author. The latter, to elude obscurity, went into sensationalism and propounded theories of straw." Now when such men as Huxley and Tyndall, acknowledged to be at the head of the front ranks of the materialists, deliver feeble and decrepid lectures, stoop to sensationalism and advance theories of straw, as Dr. Draper alleged (and as he was a member in good standing should know) it has the appearance to those who are lingering in the rear that they are themselves unable to distinguish the material from the immaterial, and are, therefore, not competent judges; in fact, it is a modern tower of Babel. Dr. Draper attributes this mental failure to the fact "that the professors in the various departments of science must either be making important additions to the aggregate of scientific discovery, or lose their prestige as leaders. The demand for new experiment is urgent and must be met, and no man but he who has experienced the attack on his brain and nervous system of this constant but silent pressure can possibly understand why it is that the incumbents break down so prematurely." So here it is in a nutshell; their theory will not stand the scientific test, for, like the Darwinian, it is hypothetical and its value must be estimated by its ability to account for all the facts of which it pretends to be the solution; for if there is one fact at variance with an hypothesis it must give way and the fact stand, for one fact, as Prof. Huxley has truly said, is worth 500 hypotheses. Yet all fair-minded men must admit that they deserve credit for the destruction of many scientific theories and common beliefs built on a rotten foundation of ignorant superstition, and the re-building of the same on rocks of truth; and which, but for their labors, we would yet be in the uncertainty of ignorance. As for the tax on their brains of which he speaks, this must be due to the mental overty of the workmen. And "the constant but silent pressure" complained of must be the weight of a troubled conscience, and not the effect of scientific research, as he claims; for if they will measure the amount of work accomplished by Huxley, Tyndall, Draper, et al., with that of Galileo, Newton, Socrates, Milton, Faraday, Humboldt, Mad. Somerville and a host of others too numerous to mention, they must acknowledge that if the "silent pressure" in searching for new discoveries, "taxes the brain and nervous system until men grow prematurely old," then the latter possessed extraordinary brains and nervous systems, or the professors in the former schools were and are lamentably weak in this respect. For Socrates was nearly seventy when he made his immortal defence before his worldly judges. Humboldt, at eighty, finished his renowned "Cosmos;" Milton, his greatest work at sixty; and Madame Sommerville, her last scientific and standard work, "Molecules and Microscopic Science," in 1869, at the age of ninety. Galileo was seventy when he discovered the earth's motion,and when he uttered that audible truthful recantation whisper, "But it does move," the echo of which still resounds throughout the civilized world, making immortal his name and fame, as the unfolder of one of nature's secrets, which proves to every thinking human being the omniscient wisdom and infinite love of his Creator.

No, the very denial of an intelligent creative cause is in itself sufficient evidence of a weak mind, and the premature breaking down of this class of philosophers, complained of by Dr. Draper, is, under such circumstances, perfectly natural, and therefore to be expected. It is a well established fact that when the mental faculties are exercised on one subject to the exclusion of others, such a course inevitably terminates in insanity. The materialists are strong in the destructive, but weak in the constructive element; they work in unison in their attempt to destroy existing premises, but wholly fail to agree on constructive substitutes. This discovers their weakness, as it is irrefutable evidence that they are not satisfied with their own experiments; in a word, practically, it has proved a failure.

[TO BE CONTINUED.]

SOCIETY PROCEEDINGS.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, held September 21, 1885. The President, C. T. Parkes, M. D., in the chair.

"SPECIAL VERSUS GENERAL STUDY IN MEDICINE"

Was the title of a very interesting essay by

Dr Charles F. Sinclair. The following is an abstract: During the seventeenth and eighteenth centuries there existed several schools of medicine founded upon medical investigations stimulated by the discovery of the circulation of the blood by Harvey. These schools were founded upon theories. One school explained the processes of life as due to mechanical laws; another as due to chemical laws; still another, as due to molecular movements; and finally, schools were founded who respectively promulgated the doctrines that life was due to an ether or a spirit existing in the grosser material of the body. Thus we see that medical thought and investigation began to divide. This subdivision in thought led to separate investigations, and specialism was the result. This tendency, which is becoming more marked each day, may be called, perhaps, the distinguishing characteristic of recent medical study. The more clearly defined and generally recognized specialties today are surgery, diseases of the eye, diseases of the ear, diseases of women, diseases of children, diseases of the skin, diseases of the nervous system, diseases of the genito-urinary tract, including syphilis; diseases of the throat, heart and lungs, obstetrics and forensic medicine. The rapidity with which the tendency of special study is being developed is seen in the fact that five years ago one of our oldest medical schools gave special notice of only two of the special subdivisions I have mentioned. However, within three years this school has added a fourth year for the study of the branches mentioned. But it is objected that the student of a specialty should become practically conversant with the details of so-called general medicine. But it is a disastrous step for the young practitioner to try to cultivate a special practice from a general, if the old adage, "Once a general practitioner, always a general practitioner," is true. On the other hand, the specialist gains a footing more readily by confining himself to his specialty. It is further objected that the specialist is apt to forget that there are other important organs in the body beside the one to which he has given his attention. But this objection is puerile, when it is seen that the successful specialist must of necesity study the relations the different organs of the body hold to each other, and remember that any departure from the normal in one organ may be the result of disease in a more remote organ. The medical profession should look with favor upon this subdivision of medical work, because we see such vast accumulations of material in all the various departments of medicine that few would care to undertake, or have the ability, to even peruse our medical literature, much less master all the knowledge collected. In this day of rapid interchange of thought none can be found who can keep abreast of all the discoveries in the various departments of medicine. Another reason for the existence of the specialist is the fact that very few men can secure the expensive instruments necessary to be used in the treatment of the various diseases, nor are there many physicians who could skillfully use them were they so fortunate as to possess them. Many cases cannot be successfully treated without these instruments. In our city, specialists should receive further development,because as they are clearly defined and faithfully adhered to in practice, proportionately does the city rank as a medical center.

Dr. F. M. Weller opened the discussion by asking why the subdvision of the practice of medicine into the special treatment of disease of the various organs should not be carried further into specialties for various specific diseases? Let us have physicians whose respective specialties shall be catarrh, ague, diphtheria, etc.

Dr. W. F. Coleman said that while he agreed with the author in the main points in his paper, he thought it should rest with each individual whether he shall confine himself to special practice or emphasize it in general practice. It is advantageous to specialists that they should confine themselves to their chosen fields. But we should not judge of the benefits to be derived from specialists by the individual success of each practitioner, but by the extent each practitioner enriched our literature by the record of his investigations. It is thus that the eye and ear specialist, the specialist in throat and lung diseases, the laryngologist and others have done most to advance medicine.

"The Treatment of Syphilis"

Was the title of a paper read by Dr. L. T. Potter. He said that the treatment of syphilis must be threefold—hygienic. tonic and specific. By the latter is meant the administration of mercurial and iodine preparations. The profession seems to be greatly divided in opinion in regard to the methods of using these remedies and the length of time they should be employed. In scanning the literature on this subject the reporter was surprised to find that those high in authority differed as to these points. The reporter advanced two propositions: first, that neither the iodine preparations alone, nor mercury alone, can always be relied upon as effective in the treatment of syphilis, but that both are nec-

essary to eradicate the disease; second, that the duration of treatment must be at least two years, faithfully carried out, no matter how mild an attack. In support of his first proposition the reporter quoted Bartholow, Ringer, Jonathan Hutchinson, Keyes, Bumstead and Taylor as saying that mercury should be given in the primary and secondary stages of syphilis, and iodide of potassium in the tertiary stage. They all agree that both must be used to effect what is called a cure. In support of his second proposition, he quotes Van Buren and Keyes, Fournier, Bumstead and Taylor, as insisting upon the treatment extending over a course of two years or more. Diday says the minimum time for treatment is twenty-two months. The two-year course of treatment does not mean the continual administration of mercury or iodine, but at intervals the remedy may be discontinued for a short time, if it seems to have a debilitating effect on the patient. In the light of such unanimity of opinion of eminent authorities upon this question of duration of treatment, it is surprising that intelligent physicians will positively assure their patients that they are cured of syphilis at the expiration of a course of treatment lasting from four to six months!! A physician who does so is certainly criminally negligent, and is a misanthrope of the worst type. Then it becomes all to impress upon patients the importance of carrying on the treatment for at least two years.

Dr. E. L. Holmes commenced the discussion by saying he considered the paper very valuable, because the author lays so much stress upon the importance of thorough and long-continued treatment. One of the most important lessons he had ever received was to treat syphilis according to the plan the gentleman has advocated. Many years ago he had been taught this lesson by sad experience. It had been his lot to see many patients suffering from specific diseases of the eye long after they had been discharged by their physicians as cured. He could not understand how any physician can believe it possible to cure syphilis without carrying out the treatment a long time. In many years' practice in this city he cannot remember of having seen but three primary syphilitic lesions, and these all occurred on some portion of the eye. He saw one man who had on the upper eyelid a sore which resembled and was treated as a burn, until its course decided it to be a chancre. The man would not tell how he obtained it, but it readily disappeared under specific treatment. A great many diseases of the eye occur thus, and the physician is unable to find out how they arise. Many years ago it was taught that iodide of potash, if given in large doses, would effect a sure and speedy cure. But Dr. Holmes thought the treatment by large doses of iodide dangerous, as it ameliorates the symptoms so quickly as to cause the physician and patient to abandon the remedy too soon. In this country we do not have so good an opportunity to study syphilis as the Europeans. In Vienna and Prague, where the people live and do not pass from the observations of physicians, their statistics are more valuable and reliable than ours can be. He thought it best to give the patient all the mercury he can bear in the primary and secondary stages. Rub it in the skin and give it internally. Follow this up eighteen months or two years, and then give iodide of potassium later. Every three or four months give a course of treatment for years after. You will have no trouble impressing upon intelligent people the importance of long-continued treatment.

Dr. R. Tilley said he wished to refer to one point not touched in the paper, and that is, patients treated for syphilis are often told by their physicians of the importance of long-continued treatment, but they will not heed these warnings, and do not return. This fact will excuse the physician many times, as it is not in his power to carry out the treatment when he wishes; and thus physicians should often be relieved of the blame of not having treated their patients long enough. He did not think any intelligent physician would advocate treatment under two years, and he believed Keyes, in his last edition, extended the time of treatment to four years. Dr. Tilley was of the opinion that we cannot do without mercury, and yet some in high places teach this doctrine. Those who try to treat syphilis without mercury are certainly responsible for later developments.

Dr. J. Zeisler thought the present treatment of syphilis is not scientific, and that there had been little advance in this direction in the last century. Cases are known in which, after seven years' treatment, symptoms of the disease returned. Take the case of Prof. Zeissl, who died last year. He was infected while opening a bubo several years ago. He certainly knew how to treat himself, and yet he died of cerebral syphilis. This does not look as though the treatment of syphilis is yet founded on a scientific basis. If the discovery of the bacillus of syphilis proves to be correct, it may prove the means of enabling us to treat syphilis scientifically.

Dr. G. C. Paoli said he is by nature a cos-

mopolitan, and always selects the best from the writings of all nations. A great many books have been written on this subject, among which Ricord's stand first. Ricord was a man of great talent, experience and powers of observation. He had unexcelled opportunities for study in the Paris Hospital when he was the chief physician. In regard to treatment, all agree that mercury must be administered for a long time. There are syphilitic cases in which mercury is contra-indicated, namely, phthisical patients and in albuminuria, unless we believe syphilis is the cause of the albuminuria.

Dr. R. Tilley referred to one point introduced by Dr. Zeisler, who referred to Professor Zeissl as having died of cerebral syphilis, claiming that no one would doubt Prof. Zeissl's ability to cure syphilis. But the question is not whether Prof. Zeissl knew how to treat syphilis, but how did he treat himself? Cooper, in his book on syphilis, if he (Dr. Tilley) were not greatly mistaken, cites Prof. Zeissl as a type of those who used mercury sparingly. If that is so, and Zeissl used it only sparingly on himself, then the death of Zeissl from cerebral syphilis is a very important lesson, and bears materially on the subject under discussion.

Dr. J. Zeisler said he knew that in the case of Prof. Zeissl mercurial inunctions were made, but to what extent he was unable to say.

Dr. L. T. Potter closed the discussion by expressing himself as gratified at the amount of discussion which had been aroused; however, he was surprised at the statement that there had been little or no advancement in the treatment of syphilis. In this day of elegant pharmaceutical preparations and easy administration of mercurials and iodides, he thought there had been a great advancement, for pharmacy and chemistry have stepped in and given us preparations we did not use many years ago. Mercury should not be given when it is producing a debilitating effect.

The President, Dr. C. T. Parkes, presented to the society a specimen, with the following remarks: "I hardly know whether you would call this a pathological specimen or not. But you see a mass which was removed from a uterus, and it proves to be a sponge. A short time ago I was called to see a lady who had been treated by a physi cian who introduced a sponge tent into the cervix uteri, and instructed the lady to allow it to remain two or three days, and then pull it out. She attempted to do so, but the string broke and the sponge was not obtained. After three weeks of suffering, with a discharge per vaginam, I was called to see her. By digital examination I could not find any evidence of the sponge, the external os being closed so as to merely admit a probe. But I could not find any sponge by probing, so I introduced an Ellinger dilator, and soon seized the sponge with a forceps and brought it out. The symptoms present passed rapidly away, and the patient is now well. The point to be learned is, that when a physician introduces a sponge tent, he himself should remove it.

The society then adjourned.

AMERICAN RHINOLOGICAL ASSOCIATION.

The following are the subjects of some of the papers (with the author's names and addresses) to be read at the Third Meeting of the American Rhinological Association to be held at Lexington, Ky., Oct. 6, 1885.

"Address to the Association on Rhinology," by the President, P. W. Logan, M. D., of Knoxville, Tenn.

"Chronic Otitis Media; its Treatment in Connection with Nasal Disease." By Hiram Christopher, M. D., of St. Joseph, Mo.

"Self-Deception." By the same author.

"Hypertrophic Rhinitis; its Sequlae and Treatment." By J. A. Stucky, M. D., of Lexington, Ky.

"Treatment of Catarrh, Acute and Chronic." By A. DeVilbiss, M. D., of Toledo, Ohio.

"Treatment of Neoplasms of the Naso-pharyngeal Cavity. A New Snare." By J. G. Carpenter, M. D., of Stanford, Ky.

"Aural Catarrh and Treatment by Different methods with the Theory of each System." By Chas. H. Sims, M. D., of St. Joseph, Mo.

"Chronic Conjunctivitis Dependent upon Intra-Nasal Disease." By N. R. Gordon, M. D., of Springfield, Ill.

"Demonstrations (on the Cadaver) of the Nasal and Pharyngo-nasal Cavities, the Pharynx and Larynx." The Sections of the Cadaver will show all the Cavities, Canals and Sinuses connected with the Nasal and Pharyngo-Nasal Cavities. By Thos. F. Rumbold, M. D., of St. Louis, Mo.

"Demonstrations of the Manner of Making Applications by means of the Spray Producers; the ages of the patients being respectively 1, 3, 8, 15 and 20 years and older. By the same author.

"Removal of Foreign Bodies and Tumors

from the Upper Air Passages, with Demonstrations on a Phantom Head." By the same author.

"Treatment of Pruritic Rhinitis (Hay-fever), by Spray Producers alone; Cases." By the same author.

"On the Treatment of Secondary and Tertiary Syphilis of the Larynx, Pharynx and Mouth. By Jos. B. Payne, M. D., of Hot Springs, Ark.

"A few Suggestions on Hypertrophy of the Turbinated Processes." By E. F. Henderson, M. D., of Los Angeles, Cal.

Seven other papers are promised, but the subjects have not yet been given to the secretary.

The full programme will be ready to mail to any address on and after the 23rd of September, on application to any of the above members, or to

CHAS. A. S. SIMS, M. D., Secretary.
St. Joseph, Mo.

CORRESPONDENCE.

HEMIPLEGIA AND PAROTITIS.

ST. PETER, MINN., Sept. 20, 1885.

Editor Review: The following case is reported on account of its rarity, complete hemiplegia being an unusual sequel to parotitis.

Christ. K., aged 18, was taken with parotitis March 16, 1885. Left gland involved. There was just a moderate amount of constitutional disturbance. No necessity for any special treatment, until March 22, when, as the result of nnnecessary exposure, metastasis took place. Both testicles were involved. This complication was accompanied with a considerable fever. Temperature 103°. A suspensory bandage, hot fomentations and full doses of opium relieved the more urgent symptoms, and everything appeared to be progressing favorably until March 26. At 5 A. M. of this date he asked for a cup of coffee and some lunch. He dressed and sat up and took his lunch. In the meantime the mother was preparing the morning meal for the family, and when it was completed she stepped to the room to call Christ., and found him unable to speak intelligibly, the face distorted and complete loss of control over the left side.

I saw him at 10 A. M. and found complete hemiplegia of left side. Both eyes were turned to the right and upwards. Pupils widely dilated. Both eyes were deeply congested. The entire left side was cold and bathed in perspiration, and, from the disturbance of the circulation, of a bluish color. There was a considerable difficulty in swallowing on account of the involvement of the muscles of the left side of the pharynx. The bladder was also implicated. Bowels constipated. Temperature under right arm 101¼, under left arm 97½. Pulse at right wrist 110, full and regular. At left wrist was just perceptible. The skin upon right side of body hot and dry. When first observed by the mother the entire body felt (as she expressed it) like a piece of ice. There was intense thirst and this was the principal source of annoyance for nearly one week. Nothing seemed to relieve this symptom. There was a dull pain referred to the left side of the head. There was no vomiting. The treatment made use of was wrapping of left side in wool and hot water bags, acids for the relief of thirst, full doses of hyd. chlor. mit. to overcome the constipation and catheter to relieve the bladder. The case presented the same features for five days. The first symptom of improvement noticed was the return of the eyes to their normal position. This change was accompanied with contraction of pupils. The right eye to about the normal size, the left about one-third larger than normal. The right pupil responded readily to light the left more slowly. At this time the pulse was 90, and temperature normal. The left side had lost the bluish cast which had been so marked previously. The pulse at left wrist was not as full as at the right wrist. The appetite improved. The difficulty in swallowing had disappeared, he had regained control of the bladder. At this date, March 31, I put him upon full doses of iodide of potass., began to use the battery and massage.

April 15 I put him on iron qninine and strychnia as he appeared to be losing ground. His appetite began to fail. He responded quickly to the remedy and began to gain.

There has been no trouble with his hearing, which is normal. Dr. Knapp and others have reported cases in which deafness has resulted from parotitis. In some of the reported cases there has been facial paralysis, but in none has there been complete hemiplegia. At present the patient has partial control of the left leg. He walks with the aid of a cane, in the manner peculiar to this class of sufferers. He has less control over the arm. Can only feebly grasp any object which is plaeed in his hand. Can raise the elbow from the side, etc. The muscles of the leg respond more readily to the battery than those of the left arm. There has been a marked mental change in the patient. Before his sickness he was pleasant and good natured, now he is easily angered and very excitable. The hand and foot of this side has a marked tendency to become puffed and swollen, due to the impaired circulation. They are still making use of the battery and massage. The patient claims that there was no loss of consciousness at the time of the seiz-

ure. He compared the sensation experienced at that time to the dazed condition which follows the receipt of a hard blow upon the head.

Respectfully,

D. B. Collins, M. D.

FOREIGN LETTER.

Berne, Switzerland, Sept. 5, 1885.

Editor Review: After a delightful period of rest upon the banks of the lake of Lucerne we are now homeward bound, and I hardly expected to meet with anything more of professional interest upon this side of the Atlantic, but I have been greatly pleased with what I have seen today of the medical department of the University of Berne, and will jot down the day sights for you, as it may not be without interest to your readers to know what is done for medical science in even so small a place as this.

I was especially interested in this school as my old freind and fellow student, Dr. von Nencki, is now Dean of the Medical Faculty; and it is a fair evidence of the esteem in which the scientific departments of medicine are here held to see that a professor of medical chemistry is chosen as Dean of the Medical Faculty; not only this, but capacious and well arranged new laboratories have just been built for chemical, microscopical and pathlogical work.

Berne, with its 35,000 inhabitants is the capital of the canton of Berne, with between 200,000 and 300,000 souls, and its university, with that of Zurich, is the most important in Switzerland; the chairs in the medical department are well filled and students from all countries are here assembled.

But what I wish to emphasize is the attention which is here paid to those generally neglected scientific departments of medicine.

In our schools they are hardly known by name; even abroad the university of Berne is prominent in the attention which it gives to medical and physiological chemistry, and which it has honored with a full professorship, similar to Strassburg; even in Berlin it takes a subordinate position.

Formerly the entire medical department was concetrated in the city proper; now the theoretical lectures only are given in the city, in the halls of the university building; separate from this is the anatomy or dissecting room. The Lying-in Hospital, in which the obstetric and gynecological clinics are held, is a fine building, in another part of the city, erected some six years ago.

The medical and surgical clinics, with chemical and pathological buildings, occupy a hillside in the suburbs, but recently completed, and most excellently located and arranged.

Coming from the city we enter the central administration building, which is flanked on either side by hospital buildings, one for surgical, the other for medical cases; to the rear of these, a little farther up on the hillside, is another series of solid well-ventilated structures. The medical and surgical clinics are behind and above the respective private hospitals, and in the rear of each are lecture and operating rooms, with light from all sides, the entire roof transparent; but upon the northern light the operator mainly depends.

Separating these two clinics and in the rear of the central administration building is the wash-engine- and furnace house.

Upon the brow of the hill, as the apex of the triangle, stretches the long two-story building devoted to purely scientific work. One-half is given up to pathological anatomy, with post-mortem rooms, laboratory and rooms for microscopcal work. The other half is for medical and physiological chemistry, with arrangements more perfect than in any other laboratory of its kind. The chief is a wide-a-wake man who has carefully studied the innovations of others and has endeavored to combine all that is useful in this litlte *chef d' œuvre* of a laboratory.

The enterprise and progressive spirit of the faculty have combined with the superb and healthy location to make this group of buildings one of tne most perfect little centres for the medical—especially the scientific medical student.

Particulars, especially of the laboratories, would be of little interest at this moment; I will merely say that all details, external and internal, have been carefully looked to; such as ventilation, heating, lights, facilities for work, even communication, which might prove a difficulty upon this steep hillside, but there we find winding walks, steps, and even a steam car, so that the patient can be moved on the smooth rail up the steep incline. Nature has done much to cast a charm about this place; the view, especially from the laboratory on the brow of the hill, is superb; to the left we see the chain of the snow-clad Berner Alps, whose highest peak is the famous Jungfrau; to the right are the Freiburg Alps, and to the rear the mountains of the Jura. In short, I was delighted with this day in Berne, and with the University of Berne.

The company of an old fellow student who has himself done so much toward the creation of this ideal little medical school and the grandeur of its natural surroundings undoubtedly added much to the pleasure of the visit; it certainly formed an agreeable finale to the medical experience of this year's vacation.

In sincere expectation of soon meeting you,

Truly yours,

G. J. E.

THE WEEKLY MEDICAL REVIEW.

MEDICINE AND SURGERY.

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ANTIPYRINE IN ACUTE ARTICULAR RHEUMATISM.

Dr. A. Neumann, physician to the Berlin Hospital Moabit, reports in No. 37 of the Berliner Klinische Wochenschrift his experience with antipyrine as an anti-rheumatic agent. Up to date only a limited number of such cases have been reported.

Lenhartz (Deutsch med. Wochenschr, 31, 1884,) and Alexander (Bresl. aerztl. Ztschr. 14, 1884,) first called attention to the good effects of antipyrine in acute rheumatism; the latter had seven successes in eight cases.

Demme, Deutsch. Med. Wochenschr. 31, 1884), also reports two successes with antipyrine in two cases of polyarthritis rheumatica acuta. Neumann gives a report of cases of acute and subacute rheumatism, that were all treated with antipyrine, in some few salicylate of soda also being given. The impression of Neumann is the same as that of Demme, who says that the action of antipyrine is identical with the well-known therapeutic effects of salicylic acid in this affection. Both drugs relieve the arthritic pain promptly and reduce the swelling more or less rapidly. On the other hand, the one as well as the other mode of treatment offers no safeguard against cardiac complications, or relapses of the acute process, or troublesome residuals of the acute stage. Finally there are cases met with as indicated in the above quoted reports, that are not at all benefited either locally or as regards the degree of fever. These refractory cases seem as stubborn to the action of salicylic acid. Again, observation teaches that there are cases that are more impressed by the one than the other of these rival remedies; and this conclusion gives antipyrine a place in anti-rheumatic treatment. Another and a very important point in favor of antipyrine is the absence of intoxication The grave symptoms that develop often after the requisite large doses of salicylate of soda, are entirely avoidable if antipyrine is given with due regard to the age and constitution of the patient. Individual idiosyncrasy or pronounced preference of one or the other drug also are factors to determine our choice of one or the other remedy.

Neumann gave 0.5—1.0 grm. from three to six times a day. The largest total amount given was eighty-three grms.

We lack space to go into the detail of the histories Neumann gives, and append the notes of two cases kindly given us by Dr. George Richter, of St. Louis, who used antipyrine at the suggestion of Dr. John H. Hermann, who had good results in a number of cases of acute rheumatism.

CASE I. Mr. S., huckster, æt. 26, had been ill with fever and painful swelling of knees and ankle joints for about ten days. Temperature 101.4° F., heart normal. Prescribed salicylate of soda, one-half dram every two hours; also sulphate of quinine in five grain doses with one-sixth of a grain of morphine every three hours. He mended rapidly. Three weeks after was again called. Patient stated he had not been entirely free from pain and swelling in the interim. He was abed again. Temperature 101.0° F., pulse 100. Pain and swelling in both knees, right ankle and several knuckles. Prescribed antipyrine one dram to be taken in five doses at hourly intervals. The result was wonderfully prompt. Pain vanished and stiffness disappeared by the following day. No relapse since.

CASE II. Mrs. W., housewife, æt. 19, ill for three weeks with polyarthritis rheu-

matica. No fever at date of visit; pain and swelling in fingers, shoulders and left knee, which was flexed ad maximum. Heart normal. One dram of antipyrine was ordered to be taken as above cited; repetition on the following day. Marked improvement in all joints affected. The knee joint however did not mend and probably surgical treatment alone will eventually benefit it.

Cave Cocainum!

In presenting the following notes on the use of cocaine in internal administration, we refer our readers to the results reported by Erlenmeyer, as contained in No. V, p. 81, Review, and to the experience of Dr. Louis Bauer, related in his paper read before the Mississippi Valley Medical Society, and published in the Review of the 19th of September.

Drs. H. Smidt and C. Rank, physicians to Dr. Binswanger's well-known private asylum Bellevue on Lake Constance, sum up their experience with cocaine in morphinism as follows:

1. Cocaine is a most valuable remedy in the treatment of the opium habit; it shortens and makes tolerable the period of withdrawal and at the same time does not exercise any baneful influences.

2. With the reduction of the dosage of morphine gradually increasing doses of cocaine should be given.

3. The best mode of administration is hypodermically in a five per cent solution.

4. The average single dose for adults is 0.05 grms. ($\frac{5}{6}$ grain.) Doses of 0.1 to 0.15 grm. may be given now and then with no evil consequences. Doses exceeding 0.2 grm. are dangerous.

5. As far as our experience goes no greater tolerance or habituation of the drug is developed.

The authors, as will be seen, antagonize Erlenmeyer directly and state that the unsatisfactory results of the latter are due to the very small doses employed.

Highly interesting in this connection is the result of the studies of Dr. Jerome K. Bauduy, as laid down in a paper read before the American Neurological Society, June 17, 1885, and entitled "Physiological, Pathological and Clinical Notes on Hydrochlorate of Cocaine, with especial reference to its use in Melancholia," published in the New York Medical Journal. Dr. Bauduy having experimented extensively and perseveringly with this wonderful drug, feels it incumbent upon himself to lay before the profession the conclusions he has reached, although many of them are still not sufficiently matured by time and experience.

He details the effects of the drug upon the intestinal tract, the genito-urinary system, the circulatory system and respiration, the vaso-motor nervous system and cerebro-spinal nervous system.

As a result of his observation he is of the opinion that the drug will have its greatest future in the treatment of many forms of obstinate nervous disease. Anemia, depression, prostration, neurasthenia, and particularly many disturbances of the vaso-motor system, will be the domain of its most brilliant therapeutical achievements.

However, says the doctor: "The only caution to be observed in these cases is to administer the drug hypodermically, and this by the hand of the physician himself. This I particularly insist upon. The drug should not be known to the patient, nor the amount of the alkaloid which is being given. If these precautions are not adopted there is great danger—nay, a certainty—that a cocaine-habit will be formed, more disastrous in its results than alcoholism or morphinism."

Insanity, and more especially melancholia and hysterical and hypochondriacal insanity, furnish the great therapeutic field for the useful administration of the drug. To quote the author:

"In most cases of melancholia, even those of very long standing, its effects are manifested almost instantly after giving it hypodermically. My usual method has been to inject one grain, dissolved in ten minims of distilled water. Making all allowance for

idiosyncrasies, differences in individuals, variations in the purity of the drug, and other factors not necessary to mention, it may be said that within five minutes the specific effects are fully manifested. The patient who has been morose, silent, taciturn, a prey to the most profound grief or sadness, recovers his normal self, begins to talk about his case, and wonders how he could ever have experienced such gloomy ideas. The cloud over the mind is dispelled, and, instead of the anorexia felt by the normal individual who takes the same dose experimentally, the melancholiac no longer refuses food, and, in place of inveterate insomnia, will have a good night's rest. It is in recent cases that its curative effects are most manifest. In those of prolonged standing these results are apt to be rather transitory. In one case, that of a suicidal melancholiac from Arkansas, recently admitted into St. Vincent's Asylum with an ugly gash in his throat, the duration of the disease was less than a month from the time of his arrival at the institution. Only five injections of cocaine were given, and he was discharged, completely restored to mental health, before his injury about the throat had completely cicatrized."

The toxic effects of the remedy are next considered and such a weird picture drawn, that we can well say, "Cave Cocainum!"

Says the doctor: "Too frequently repeated medicinal doses or very large quantities of the drug, injected subcutaneously at once, produce results alarming both to the subject and to the spectators. The entire surface becomes pale and covered with perspiration; the pupils dilate gradually and are insensible to light; profound nausea, but no vomiting, follows; the muscles of mastication become more or less rigid and affected with clonic contractions, this effect being produced only among the earlier physiological and toxic effects; there are violent grating and gnashing of the teeth, so that small portions of the enamel are ground off. Tonic contractions of the same muscles (trismus) are sometimes observed, but exceptionally. The eyes assume a fixed, wild, staring gaze that is as characteristic as it is indescribable. There is ceaseless jactitation, with a sensation of wild nervousness that is almost unbearable. There is voluminous loquacity, an extraordinary fluency of speech, the volubility of which must be witnessed to be credited. Excitations of the sexual propensities, one rapidly succeeding the other with astonishing celerity, of a teasing character, are generally observed."

After detailing some lamentable experiences in all their painful minutiæ, Dr. Bauduy speaks in the following strong and impressive terms:

"In concluding a study of the phenomena produced by the poisonous effects of this drug, I may say that the most alarming are: the most debasing enslavement of the will, a general demoralization which is as diabolical as it is indescribable, and which tends rapidly toward depravity and to the development of everything that is degrading and ignoble in human nature. The influence of alcohol and of other alkaloids and narcotics, so well known and so frequently described, pale into insignificance when compared with that of cocaine. Habits of the most detestable character; a settled indifference to every interest of life; destruction of the most noble affections and affiliations; the utter death of friendship and of all the noble qualities; complete disregard of all social and domestic duties, of even pressing family necessities and the common interests of daily life; the radical extinction of every previous religious spark that has enlivened the soul; the development of the most intense selfishness—these are the certain results of indulgence in this the most powerful and devilish drug which it has ever been the misfortune of man to abuse. The most powerful morphine habit of which we can conceive is to the power and bondage of cocaine as the weakest sapling to the full-grown oak."

Delirium of Bright's Disease.—At a meeting of the Société Médicale des Hopiteaux (Canadian Practitioner), M. Dieulafoy read a paper on "Certain Troubles in Bright's Disease, particularly Delirium." Certain

cases present troubles of the intellect, which generally appear when these patients have already suffered from other uremic symptoms. Usually the disease is mild and quiet. In some rare cases this delirium is marked; the patient is agitated, has insomnia, gets up every minute, and the strait-jacket has to be resorted to. In others hallucinations of hearing or sight predominate. This delirium of Bright's disease has been long known. It has been well described by Laséque, in 1852. According to him, the delirium was due less to the renal lesion than to other predisposing causes—hysteria or alcoholism. There are, however, a good number of cases in which uremic delirium came on without other cause, hereditary or personal. These delirious troubles are truly attributable to uremia. When this delirium is associated with other symptoms of uremia, it is an epiphenomenon of secondary importance; but at other times it is a dormant symptom; edema and albuminuria may be absent, and still we have to do with a case of Bright's disease. This is of great importance, not only in a diagnostic point of view, but also in a point of view as to treatment and as to medico-legal cases. These patients may be committed to an asylum, or be fed with the stomach pump, or have the cold douche applied—all absolutely contra-indicated in Bright's disease. There is also the question of responsibility, capabilty of making a will, etc.

M. Dieulafoy gives six cases in support of the above remarks.

I. A female, aged 37, admitted February 14, 1885, to St. Antoine ward. She was completely dumb, haggard, stupid; fingers contracted; refused all food; greatly agitated; no symptoms of hysterical mania; urine slightly albuminous, contained very little urea. Temperature 36°. Treatment: Milk diet, large sinapisms over the kidneys. During eighteen days this patient went through all the forms of mental alienation, ideas of persecution, etc. Tongue dry, abdomen tympanitic, constipation. The albumen disappeared; the temperature rose; improvement. There was never any edema. She complained of itchings in the back and arms, prickings and cramps in the legs. There was vomiting nearly every day, and copious epistaxis. There was no personal or hereditary cause. The albuminuria, which had reappeared, disappeared again; the urea increased; there was a second amelioration, then the vomiting returned, with recurring epileptic attacks, and death after sixty-five days' illness. All the organs were found healthy except the kidneys, which presented the characteristics of Bright's disease.

Five other cases are cited. One, aged nineteen, with acute nephritis, profound stupor, refusal of food. Temperature 35° C. Cured of nephritis and insanity.

Another, with delirium of prosecution and acute mania, cured; died two years later of Bright's disease.

A fourth, aged 19, known to have Bright's disease—furious mania cured after four months. Died four years after from Bright's disease.

The fifth, known to have had Bright's disease for a long time. Insane nine and a half months. Cured, the kidney trouble remaining.

The sixth had all the varieties of delirium —a female—erotic, succeeded by religious mania. She died maniacal, and with Bright's disease.

In these cases the duration was from twenty days to eight and a half months. The nature of the delirium varied. Sometimes there was acute, violent mania; sometimes lypemania, sometimes erotomania, sometimes religious mania, mania of persecutions, etc., etc. The diagnosis is sometimes very difficult, for there are cases in which we find no other signs of Bright's disease, neither edema nor albuminuria, at the time of observation. As to prognosis, these cases are not so grave as the comatose or epileptiform. The treatment is that of Bright's disease.

How Physicians are Treated in Spain. —Apropos of the superstitious ignorance of the Spanish people that has caused them to antagonize the efforts of sanitarians in their behalf, and that has cost them already the

lives of some 80,000 persons, the Medical and Surgical Reporter notes the following from the Moniteur Universelle:

"At Puebla Larga, a suburb of Barcelona, a man died of cholera recently. The relatives of the deceased gave no notice of his death, but concealed the fact from their nearest neighbors. When the attendant physician made his morning call he found all of the family in an outer chamber, apparently as happy and jovial as usual. He was invited by one of them to step in and see the patient. He did so, and, on approaching the bedside and finding him dead, was about to retire, when he found himself surrounded by the relations, whose smiles were now turned into scowls and threatening visages. The head of the family was the first to speak. Pointing to the dead man, he exclaimed: 'It is thus that you do the work we pay you for. You promised to save him—see the result.'

"The others chimed in, calling the doctor an assassin and a murderer, and one said: 'This is the third one you have slain in eight days, miserable assassin that you are!'

"While this was going on, the whole crowd had gathered close around the doctor, the men shaking their fists in his face and spitting upon him. Suddenly, with a cry, the wife of the dead man leaped upon the physician, while the others seized the remnants of the medicines which he had ordered for the patient, and commenced to force them down his throat. The doctor struggled, but was powerless against numbers, and was not released until every drop of the potions, the draughts, the clysters, every pill and powder had gone down his throat.

"For twenty minutes the unfortunate physician was thus held and tortured, and when he was finally released by his savage captors and allowed to depart, he was more dead than alive.

"In less than one hour from the moment of leaving the house, he was a corpse.

The father of the victim, an old man and in poor health, took to his bed on the death of his son, and in two days he, too, was no more.

"The affair has created an intense feeling among the physicians, and the Medical Institute having been called together, is now considering what course shall be taken in order to protect physicians from the blind ignorance, fanaticism and fury of the populace in such cases."

A Case of Chronic Parenchymatous Nephritis Cured by the Subcutaneous Injection of Pilocarpine.—Dr. Lazarus reports a case of chronic parenchmatous nephritis cured by hypodermatic injections of pilocarpine, in the Wiener Medicinische Presse, (Medical News).

The patient, when first seen by Dr. Lazarus, May 11th, had been ill several months, and his entire body was swollen and shapeless. The legs, belly and scrotum were enormously distended, and the last was attacked by supfiercial gangrene. Both buttocks, both thighs, and both legs, as well as both feet, were the seat of pus-discharging ulcers, due to phlegmonous inflammation of the subcutaneous cellular tissue. A bedsore in the sacral region added to the pain and discomfort of the patient. Great difficulty in breathing was also experienced, and profuse diarrhea was present. The urine was scanty, and had a specific gravity of 1040, and in consequence of the great amount of suspended material, composed of epithelial scales, detritus, etc., was cloudy, and even before the boiling point was reached was converted into a stiff jelly.

On inquiry it was learned that the present condition began entirely unnoticed, and that in February the swelling of his feet lead him to seek professional advice. Continuing his employment until April, he was at last compelled to remain in bed, owing to the increased swelling in his feet and to extreme weakness, and to subject himself to systematic treatment.

Treatment consisted in the employment of hot baths and in the medication generally employed in the treatment of Bright's disease, but no improvement resulted. Dr. Lazarus at once determined to resort to the hypodermic use of pilocarpine. Previous to the administration of the drug, a small quan-

itty of brandy was given to support the heart, and followed by the injection into the thigh of one-third of a Pravaz's syringeful of the following:

℞. Pilocarpin. muriat, - gr. iss.
Aquæ dest., - - - f ℥iiss.

The patient at once began to prespire abundantly, and for six hours was continuously bathed in perspiration; at the same time abundant salivary discharge was excited, amounting the first day after the injection to fully a quart.

The only unfavorable symptoms noted subsequent to the administration of the drug, were repeated vomiting and difficulty in swallowing. Brandy in quantities of a teaspoonful was administered two or three times hourly, and no symptoms of collapse were manifested. The second day a half syringeful of the same solution was injected, the third day two thirds, and the fourth day a whole syringeful, and for three weeks subsequent a like quantity was injected into each thigh alternately.

The quantity of urine increased under the treatment from eleven ounces per diem, having a specific gravity of 1040 at the time of the first injection, to more than two quarts, with a specific gravity of 1002 at the twentieth injection. With the twentieth injection the dropsy had entirely disappeared, and the extreme emaciation of the patient became apparent. In the region of both trochanters, on the outer side of each thigh, as well as upon the outer side of the legs, there were large purse-like expansions of the cutis, due to phlegmonous inflammation in the subcutaneous cellular tissue, fluctuating and painful on movement.

Believing that the small quantity of albumen still persisting in the urine, and the feverish condition of the patient, were the result of these purulent collections, Dr. Lazarus opened the pouches at brief intervals, and treated them antiseptically with iodoform gauze and drainage; they rapidly healed, as did also the bedsore and superficial gangrene of the scrotum. At the same time the secretion of urine rapidly increased, so that the quantity passed exceeded the normal, reaching three to four quarts daily. The citatrization of the last suppurating cavity was followed by the entire disappearance of albumen from the urine. The patient was finally subjected to further treatment by hot baths, and daily increased in strength, his health finally becoming entirely restored.

Incision of the Pericardium in Purulent Pericarditis.—At a recent meeting of the Moscow Russian Medical Society, Dr. Ekaterina A. Mikhailova communicated (Meditz Obozr., Fasc., 1885) an interesting case of purulent pericarditis of traumatic origin, treated by tapping and incision of the pericardium, which is summarized in the London Medical Rocord (Boston Medical and Surgical Journal.)

The patient, a cook, aged 35, who had for many years suffered from cardiac palpitation and rheumatic pain in the right side of the chest, was admitted to the Staro-Ekaterinensky Hospital five days after a fall from considerable height. For the first day after the accident the patient had remained in an unconscious state; on return of consciousness on the second day she tried to get up and to resume her usual work, but had found herself unfit for anything on account of giddiness and intense attacks of palpitation.

On admission she looked pale, anemic and exhausted; the tongue was whitish, moist; pulse small, 90; temperature 39° C. The chest was normally developed, its excursions being equal on both sides, though not energetic. The apex-beat was not visible, and hardly perceptible to the touch. The cardiac dulness commenced from the third rib; its left border passed slightly beyond the nipple line, the right reached the median line, and the lower extended downwards to the sixth rib. The heart-sounds were feeble, but otherwise normal. A dull area was detected over the posterior aspect of the right side of the chest, extending from the scapular angle down to the lower border of the lung. Auscultation revealed there enfeebled vesicular respiration. The patient could not lie on her

right side, on account of the dyspnea being increased.

For the next eight days, the patient's state remained much the same; on the ninth day there appeared intense dyspnea, and cyanosis of the lips and nose; the pulse became much smaller and intermittent, 120; the urine contained much albumen, pus-corpuscles, and hyaline casts. On examining the patient on her back, the cardiac dulness now commenced from the lower edge of the second rib, extended on the left to the anterior axillary line, and went on the right slightly farther than the right edge of the sternum, the lower border remaining at the sixth rib. The apex-beat could not be felt any more; the heart-sounds were clear, but very feeble and intermittent. On the fourteenth day, edema of the subcutaneous tissue in the precordial region was noticed.

The cardiac symptoms steadily growing worse, on the fifteenth day aspiration with Dieulafoy's apparatus was performed in the fourth intercostal space, and 120 cubic centimétres of fluid drawn off. The first eighty cubic centimétres consisted of pure cream-like pus, the remaining forty almost entirely of blood. Immediately after the puncture, the patient was in a state of semi-collapse, but on the next day there was noted a slight improvement in the subjective symptoms. On the seventeenth day the cardiac dullness reached up as far as the clavicle, the pulse became scarcely perceptible, the dyspnoa extreme; the lungs were full of mucous râles. To satisfy the vital indication, incision of the pericardium was decided upon and performed by Drs. P. P. Minin and Hindenburg. It measured about two centimétres in length, its spot being close to the left edge of the sternum, in the fourth intercostal space. About two fluid pounds of fetid blood-stained pus escaped. After washing out the pericardial cavity with boracic water (at 38° C.), a drainage-tube was inserted, and the carbolic gauze applied. Striking relief immediately followed; the dyspnea diminished, the pulse became regular and 90; the cardiac dullness normal. However, in spite of three successive subcutaneous injections of ethereal tincture of valerian, the cardiac action remained low, and eighteen hours after the operation the patient died.

Analyzing the details of the case, Dr. Mikhailova arrives at the conclusion that she had to deal with an instance of idiopathic purulent pericarditis caused by injury. Pointing to the fact that in her case (as in the case of Partzevsky, for which see the London Medical Record, Feb. 1883, p. 32) the operation was resorted to too late, the author states her belief that incision of the pericardium in cases of purulent pericarditis may be followed by a favorable issue only when it is undertaken in presence of a healthy cardiac muscle. On the other hand, however, she seemingly admits Professor Rose's dictum that, as a rule, incision of the pericardial sac in purulent pericarditis has the same therapeutic value as tracheotomy in certain affections of the respiratory organs.

At the post mortem examination, there were found fatty degeneration of the cardiac muscle, dilatation of the pericardium, fibrino-purulent exudation, with admixture of blood in the pericardial sac, right hydrothorax, total obliteration of the left pleural cavity, edema of the lungs with purulent bronchitis, marantic thrombosis of the pelvic veins, and of the vena spermatica interna dextra, ischemic necrosis of the right kidney; the same, but in a less advanced stage, in the left kidney. A search for bacilli in the heart and pericardium gave negative results.

Cocaine in Venereal and Syphilitic Disorders.—The experience of Bono with cocaine in affections of the genital system as published by the Gazz. delle Cliniche, (Therapeutic Gazette), can be conveniently epitomized as follows:

1. An injection of a few drops of a two per cent solution of cocaine removes promptly the pains felt in acute gonorrhoea during micturition and erection. The injection has to remain in the urethra for at least five minutes, and to be repeated four to five times daily.

2 This cocaine-injection is unrivalled in rendering caustic injections or the introduction of the catheter painless.

3 The burning pains of blennorrhea in women yield invariably to small cotton tampons saturated with a two per cent solution of cocaine, or to the application of a five per-cent solution of cocaine, or to the application of a five per cent cocaine ointment.

4 Cocaine facilitates the examination of urethra and bladder with the bougie and the endoscope.

5 It allows of a painless cauterization in balanoprostatitis.

6 Pointed condylomata can be painlessly cauterized, excised, or scraped out with its aid.

7 In cauterization and excision of primary syphilitic affections, cocaine evinced very desirable analgesic virtues of a sufficiently long duration.

8 Taken internally during an antisyphilitic treatment, cocaine did not present any appreciable effects.

9 Its local effects are highly beneficent in syphilitic tonsillitis and in stomatitis mercurialis, and difficulties of deglutition.

Bono refers also to its analgesic properties in acute painful eczema, pruritus vulvæ, sore nipples, and burns.

As Bono's observatious were confirmed by Blumenfeld, Frankel, Pick, and Neisser, they are entitled to attention and confidence.

Heredity of Phthisis.—Izaak Johannes Hage ("Akad. Proef. Schrift., Leyden, Holland, Schmidt's Jahrbucher, B. 200, Medical and Surgical Reporter), under the title, "Sets over de Herediteit der Phthisis," considers the following questions:

1 What is the connection between the hereditary phthisis and that otherwise acquired?

2 Has the father or the mother the greatest influence in developing hereditary phthisis?

3 Does phthisis descend more from father to son, and mother to daughter; or conversely

4 At what period of life does hereditary phthisis make its first manifestation?

5 Is the factor of heredity greater or less in the country as compared with the city?

6 Is there a difference in regard to heredity in the sexes in the city or country?

After consulting the literature of all languages and the reports of public and private institutions and leading authors in a manner too complete to consider here, the writer came to the following conclusion:

1 About three-fourths of the patients treated made satisfactory statements concerning their family history.

2 Somewhat less than half of the patients descend from phthisical parents.

3 The influence of the mother in the origin of hereditary phthisis is about four-fifths that of the father.

4 Hereditary phthisis descends mostly from father to daughter, but quite as often from father to son as from mother to son, and least of all from mother to daughter.

5 The first manifestation of the disease appear both in cases which are hereditary and in those which are not hereditary twice as often before as after the thirtieth year.

6 With reference to time of life the endurance of the disease is greatest, there is no difference as to before or after the thirtieth year.

7 Heredity is as great in the country as in the city.

8. With men the heredity is greater in the city than in the country; with women the converse is true.

Skin-Diseases of the Lower Extremities Resulting from Ulceration.—In a paper entitled "Report on the Progress of Dermatology," by Dr. A. Van Harlingen, published in the Philadelphia Medical Times, we find the following:

Unna (Medical Press, April 15, 1885, from Deutsch. Med. Zeitung) includes under this head simple pruritus, various forms of eczema, edema, and pachydermy, superficial phlebectasiæ, hemorrhage, and lastly ulcer of the leg. In all these blood-stasis is the primary symptom and the principal cause of the succeeding phenomena. The indications for treat-

ment are: 1. To remedy the symptoms of impeded circulation; 2. To ascertain and apply the local treatment demanded by the existing condition of things. Under the first head Unna rejects the treatment by horizontal posture with elevation of the limb, because so soon as the foot is placed upon the ground again, stasis once more comes into play. Bandages properly applied are of high value. The ordinary bandages are only useful in mild cases. Martin's rubber bandage is very valuable, but the weak point of the material lies in its impermeability. It answers well when but little moisture is given off; but in those cases where there is abundant transudation, where eczema or discharging ulcers are present, the india-rubber bandage is not only of no use, but almost invariably sets up a frightful eczema which at once demands a change of treatment.

Instead of Martin's bandage, Unna now uses the following procedure. Take, for instance, a neglected case of varicose veins partly covered by moist and partly by dry eczema, on the under anterior third of which is a dirty necrotic undermined mass surrounded by a soft loose border. After a thorough cleansing with soap and water, he paints the whole over as far as the ulcer with warmed zinc paste (℞ zinc. oxid., gelatin. pur., aa 10; glycerin., aquæ. aa 40. To be painted on warm). Upon the ulcer itself iodoform is dusted, and a layer of lint placed which may also be saturated with iodoform or sublimate. He then takes an ordinary roller, such as is used in bandaging with plaster of Paris, and rolls this up from each end so that it has at last two heads of equal size. Thus rolled up it is dipped into water, squeezed out, and then applied in the following manner to the leg covered with paste and not yet quite dry. The patient sits with his leg raised opposite the surgeon, who grasps with his two hands the two heads of this bandage so that the connecting piece between the two heads comes into contact with the limb behind and opposite the ulcer. The two heads are then brought forward and covered over the ulcer, already covered with the lint or gauze. The heads of the bandage are then made to change hands, and firm tension is made, so that the leg at the level of the ulcer is plainly diminished in circumference. The two heads are then carried backwards and crossed either above or below, but under all circumstances opposite to the ulcer. The heads again change hands and are carried forward, crossed in another place and tightened, and so on until the whole of the affected part is covered by the bandage. A second moistened prepared bandage is then immediately placed over the first, for the purpose of filling up the thin places of the first and strengthening it. The second may be put on in the same way as the first, but it is usually done in the ordinary way. The bandage soon dries, and it is allowed to remain on from two to four days, according to the amount of secretion going on under it. The pain on walking and putting the foot down soon becomes less, so that the patient's occupation is not interrupted. The more firmly the bandage is laid on, the better is the result seen on taking it off. It is, therefore, laid on as tightly as the patient can bear at the time. When the quantity of secretion diminishes, this "permanent bandage" may remain on eight days.

Every time the bandage is changed—it should be taken off while the leg is in a pan of warm water— an agreeable improvement in the ulcer is observed; at first, cleansing of the bottom, then flattening down of the edges, then covering with healthy granulations and progressive diminution in size by advance of the border of epithelium. In the meantime the zinc paste, assisted by the restful pressure of the hardened pasty bandage, acts beneficially on the eczema, and astringently on the whole leg. The essentials are the peculiar manner of applying the bandage from both ends, and the preliminary application of the paste. This method of application leaves absolute permeability. It is important to cover the healthy skin with the paste, so as to get a firm basis of attachment for the bandage.

In addition, Unna gives concentrated fluid extract of hamamelis (P. D. & Co.) ♏xx

thrice daily, and also uses other internal and external remedies, the names and qualities of which are as yet unknown on this side of the Atlantic.

Cocaine Tablets in Hay Fever.—Chas. E. Sajous, M. D., Instructor of Rhinology and Laryngology, etc., Jefferson Medical College, Philadelphia, writes on this subject:

"At the request of Messrs. Wyeth & Brother, chemists, of this city, I have investigated the merits of the Hydrochloride of Cocaine Tablets, manufactured by them, each containing one-sixth gr. of the drug, as suggested by Mr. John Watson, of Westminster Hospital, London.

This method of application is doubtless the only one in which the physiological action of cocaine can be obtained. I had previously tried the drug in solution, but could not obtain, in any of the cases, sufficiently marked effect to warrant further use; in one case, it seemed to produce an unfavorable reaction and to cause aggravation. That it cannot be effective in solution is easily explained:—the great amount of secretion present so reduces the strength of the solution employed, as to render it comparatively inert. Used in tablets, the secretion forms the vehicle for the drug, and the membrane is thus thoroughly bathed with a powerful and effective solution. For the itching at the eyes, however, the four per cent solution seemed to be admirably adapted, a drop now and then, in the inner canthi, not only relieving the itching, but reducing markedly the local congestion.

In the ten cases of hay-fever (those chosen being of the worst type and all subject to asthma) in which the tablets were tried, four were under treatment by the galvano-cautery method, while the other six were merely resorting to palliative measures. The action of the remedy, however, did not seem to be influenced by the organic alteration of the surface of the membrane, in the four cases in which this was being done. In four cases out of the ten, the results were most satisfactory; not only did the tablets arrest the nasal symptoms, but they seemed to have the same effect on the asthma. The following abstract from a letter will serve to demonstrate these facts: "They seem to have modified very materially the paroxysms of sneezing, and to have stopped almost altogether the acrid secretions from the nose. Their effect in relieving the asthmatic feature of the disease was instantaneous." About the same remarks were made by the other three cases. In four other patients the symptoms were relieved, but not arrested. The nasal occlusion was greatly reduced, and the sneezing abated. In two of these, the intensity of the asthma was greatly diminished, the patients being able to sleep comfortably. In the two remaining cases, none of the symptoms were in the least influenced.

To any physician who has attended many cases of hay-fever, the record presented by cocaine, administered in this manner, is certainly a very satisfactory one, and doubtless will lead him to consider this agent as the first on the list of palliatives. As to the cases in which the tablets were not beneficial, I am inclined to believe that the quantity of cocaine in them was too small, and that a quarter, a half, or perhaps an entire grain of the drug would have operated satisfactorily. I would, therefore, suggest, that tablets of different strengths be made. Furthermore, it seems to me that an elongated shape, such as that of a bean, would facilitate greatly their manipulation and their retention in the nasal cavities.

In order to obtain the best effects, the tablets should be introduced in the nose every two hours, taking care not to use the handkerchief, during at least five minutes after the introduction. I do not consider the use of cotton in the nostrils necessary to retain the tablet in place; in fact, it is an objectionable measure, the cotton acting as an irritant."

—Billroth is afraid of iodoform, never uses it in powder, and seldom in pencils, but uses it in the form of iodoform-gauze, which is stuffed into the wound or cavity. His theory is that in this way there is little danger of intoxication, as very little of the drug comes in contact with the absorbing surface, while on the other hand, all the secretions are absorbed by the gauze and kept aseptic.

CONTRIBUTION.

THE RELATION OF MIND TO MATTER

BY AMOS SAWYER, M. D., HILLSBORO, ILL.

[Read at the Meeting of the Mississippi Valley Medical Society, Evansville, Ind., Sept., 1885.]

[CONCLUDED.]

This seems to be recognized by the most prominent members as true, for Virchow, in his address before the Association of German Naturalists and Physicians at Munich in 1877, speaking of the doctrine of man having been evolved out of matter or a protoplasm, says: "All this is very fine and admirable, and may ultimately prove true. It is possible. * * * I have no objection to your saying that atoms of carbon also possess mind, or that in their connection with the plasitude company they acquire mind; only I do not know how I am to perceive this. It is a mere playing with words. * * * The processes of the human mind may ultimately find an explanation, but at present, in my opinion, it is not my business to bring these provinces into connection. * * * Throughout this discourse I am not asserting that it will never be possible to bring psychical processes into an immediate connection with those which are physical. All I say is, that we have at present no right to set up this possible connection as a doctrine of science; and I must enter my decided protest against the attempt to make a premature extension of our doctrine in this manner, and to be ever anew thrusting into the very foreground of our expositions that which has so often proved an insoluble problem. * * * Every attempt to transform our problems into doctrines, to introduce our hypotheses as the bases of introduction—especially the attempt to dispossess the church, and supplant its dogmas by a religion of evolution—every such an attempt will make a ship-wreck, and its wreck will also bring with it its greatest perils for the whole position of science. Therefore, let us moderate our zeal; let us patiently resign ourselves always to put forward as problems only even the most favorite problems that we set up, never ceasing to repeat a hundredfold a hundred times: 'Don't take this for established truth; be prepared to find it otherwise; only for the moment are we of the opinion that it may possibly be so.' "

Prof. Tyndall, in his celebrated Belfast address, says as regards knowledge: "Physical sense is polar. In one sense it knows everything; in another sense it knows nothing. Science understands much of this intermediate phase of things that we call nature of which it is the product; but science knows nothing of the origin and destiny of nature. Who or what made the sun, or gave his mysterious alleged power? Who or what made and bestowed upon the ultimate particles of matter their wondrous power of varied interaction? Science does not know; the mystery, though pushed back, remains unaltered. To many of us who feel that there are more things in heaven and earth than are dreamed of in the present philosophy of science, but have been taught by baffled efforts how vain is the attempt to grapple with the Inscrutable, the ultimate frame of mind is that of Goethe, when he says

"Who dares to name His name,"
"Or belief in Him proclaim,"
"Veiled in mystery as He is, the All Enfolded?"
"Gleams across the mind His light,"
"Feels the lifted soul His might,"
"Dare it then deny His reign; the All Upholder?"

Bishop Vaughan, in "Science and Religion," says: "Now this seems to be the position of science; it cannot deny, and dare not, or it would contradict its own canons if it did. It cannot affirm a belief, and dare not, for science has nothing to do with belief, but with experiment and verification, after having taken a number of things for granted. Scientists must know science is false to itself when it proclaims itself to be a materialist, because it cannot exactly say what matter is, knows nothing of matter but its modalities. When it speaks this word matter it well knows that back of the word there is something unknown, unknowable and undefinable. Herbert Spencer, in Psychology Vol. II p. 391, says: Every inference depends on premises; every premise, if it admits of proof, depends on other premises; and if the proof of the proof be continually demanded, it must either end in an unproved premise, or in the acknowledgment that there cannot be reached any premise on which the entire series of proof depends. Hence, philosophy, if it does not avowedly stand on some datum underlying reason, must acknowledge that it has nothing on which to stand; must confess itself to be baseless." Here we see that one who ranks among the leaders in the materialistic ranks, makes the confession that they must recognize some fundamental unproved truth, or their conclusions will be left without a base, for we are justified (as they put the cudgel in our hands) in requiring them to show that the proof of a general proposition is deducable from a proposition of still greater generality, and so on, repeating the process until they reach their base, which cannot be

proved. Henry Hobart Bates, in the "Popular Science Monthly" April, 1883, in speaking of matter says: "The nature of matter is still almost as unknown to us, in its essence, as it was to the ancients, since in its minute structure it lies far below the range of the senses, or of instrumental appliances, and therefore beyond that direct experimental field so necessary in furnishing primary conceptions to the mind. * * * The great trouble about matter is to find how much of it, and what in it, is material. Strange to say there is nothing in which philosophers are less agreed." The celebrated atheist and scientist, Emil Du Bois Reymond, in his famous address on "The Limits of our Knowledge of Nature," delivered at the forty-fifth Congress of German Naturalists and Physicians, at Leipsic, August 14, 1872, said: "In our endeavor to analyze the physical world, we start out from the divisibility of matter, the parts being to our eyes something simpler and more primitive than the whole. When in thought we carry on this division of matter, ad infinitum we meet with no obstacle in the process but we make no advance whatever toward an understanding of things. The ancient Ionian physical philosophers were no more helpless than we, in the presence of this difficulty. * * * For two thousand years, despite all the advances made by natural science, mankind has made no substantial progress toward the understanding of matter and force any more than toward the understanding of mental activity from its material condition. And so it will ever be. * * * With regard to the enigma of the physical world, the investigator of nature has long been wont to utter his "Ignoramus" (we know not) with manly resignation. * * * As regards the enigma what matter and force are and how they are to be conceived, he must resign himself once for all to the far more difficult question "Ignorabimus" ("we shall never know"). Prof. A. P. Peabody, of Harvard College, in "Christianity the Religion of Nature," Boston, 1864, p. 64, says: "Six thousand years of research have failed to reveal in matter inherent power that produce motion, organization, growth and transformation. We talk, indeed, of gravitation, caloric, electricity, magnetism, (etc., etc.,) as if we knew what they are; yet these are but euphemisms for our ignorance—fence-words set up at the outer most limit of our knowledge. So we find to the question, What is matter? What is force? What is vitality? What is sensation? What is intelligence? What is will? Scientists, in spite of all their progress must answer in the language of Du Bois Reymond. "Ignoramus" (we know not), "Ignorabimus" (we shall never know)." We see then that science does not mean a course of universal verification, but that if it keep scientifically to its province, it can tell us comparatively very little regarding that which we care most to know, and that the most we can expect it to do for us is to present us with fresh and fresh evidences of the power and wisdom of that All-wise Being with whose works it is ever coming in contact. The truth is, we are more familiar with and have stronger evidence of the existence of the mind than we have of the things by which we are surrounded.

If I call a materialist's attention to my watch, and in explanation inform him that in strength, in construction, beauty in design, and regularity of movement, this jeweled time-recorder approximated so closely to perfection that, regardless of thermometric, barometric, and electrical changes, the variation from true time would be but the fraction of a second in six months, he would then naturally enough ask: "Who made that watch?" If I should reply, no one made it, it made itself, would not this answer justly enough elicit the interrogation, "Is he an idiot, or insane?" When night o'ershadows all the earth, turn your eyes to heaven's blue dome and behold the beauteous unnumbered orbs, the sparkling jewels of celestial light, God's axis cylinders for the control of that endless motion upon which life depends, the celestial cog-wheels which move the living shuttle backwards and forwards to weave the mottled web of life; and by virtue of which those eighty-one stars composing the majestic Orion, have moved backward and forward for thousands of years without collision or departure; for her members, like the vast stupendous stellar whole, move with a regularity and precision of which the description of the watch forms but a beggarly illustration. This infinite, endless motion of God's beautiful kaleidoscope on the canopy of heaven; this magnificently majestic illuminated planetary procession, moving with a precision which enables us to foretell for years in advance where their shadows will fall, instinctively, intuitively, prompts the question, who made these stellar worlds by which we are surrounded? If I reply, they had no maker, they made themselves, then (God alone knows the reason) instead of pronouncing the sentence, fool or lunatic, he exclaims, "Behold an advanced scientist and philosopher!" "Consistency thou art a jewel," and materialists possess thee not.

I ask the materialist how he accounts for

the phenomena of cerebration? Herbert Spencer answers. "The mind exists wherever gray matter is found, whether in the axis cylinder of Purkinje, or the neuroplasm of the cell itself, and whether found in the tenacles of a cuttle fish, the tail of a dog, or the brain of a man." Haeckel assures us that the mind is composed of cells "which possess the capacity to will, to act, to think;" but here we find that they are acted on by some superior force controlling them, for if I ask, "what do you mean by the word capacity?" they answer, "we mean force." Now what is this peculiar force, not possessed by other cells? That you believe or are convinced of the truth of your assertion, I have no doubt, but this will not answer the purpose, as it is unscientific; for remember, science deals with facts, not belief; therefore, how do you know, how can we become conscious that volition is due to the action of peculiar brain-cells, gray matter, or any other substance peculiar to the cerebral mass? Surely, it cannot be accounted for in the composition of the material out of which they are constructed; certain it is that the different form of the cell will not explain it. Therefore, it remains a very pretty undemonstrable theory without any foundation of facts. That Haeckel was honest in his belief that he had discovered that the mind consists of peculiar shaped cells, and that Spencer thought that he had demonstrated that the mind was simply the gray matter wherever found, I would not question, for with their conception of it (as we are seldom more than we deem ourselves to be), they would naturally enough expect to find it as quickly in the tenacles of the cuttle-fish, or a dog's tail, as in the brain of man, though Spencer has never shown, nor have we any data which would warrant us in asserting, that a bob-tailed dog possessed less intelligence than before he was curtailed of so much of his mental faculties. With the evidence adduced, such a predicate suggests that in his search to discover this mysterious force, he had exhausted his brain and arrived at this conclusion through an act of cerebration at the other extremity.

If you ask me what is the mind, I would answer, that something created in us that can be used to control the voluntary actions of man, as evidenced in his ability to do good or evil; to seek that which is pleasurable and avoid what is painful; to choose the occupation best suited to his endowments; the recollections of names and the objects to which they belong; that which appreciates the character of the impressions received, which knowledge enables us to adopt means for the accomplishment of particular ends; that which forms conceptive ideas in the brain of man by which he moulds the other factor (matter) into forms which, but for this, would not exist, as works of art and the inventions so necessary for success in peace or war, as well as in the struggle of civilization against barbarism. There is no other source from whence they can come. In a word, every successful invention is an idea realized; it is the material construction of a mental conception, and which but for this would never have existed. It is this pre-existing form in the mind that guides the artist's and artisan's hands, that made an Archimides and an Angelo. And just as this psychical model is perfect or imperfect, distinctly or indistinctly seen, will the material form shadow forth more plainly than can be told in language. It is related of Michael Angelo, that in explaining to a visitor at his studio what he had been doing at a statue since his previous visit, he said: "I have retouched this part, polished that; softened this feature, brought out that muscle; given some expression to this lip, and more energy to that limb." "But those are trifles," remarked the visitor. "It may be so," the artist replied, "but trifles make perfection, and perfection is no trifle." It is the mind that rules. It is this same factor which enables us to look into the future as well as the past and profit by the experience of those who have preceded us. Now, gray matter, or a so-called mind cell, no matter what form it may assume by which it is distinguished from other brain cells, cannot produce the phenomena except as an instrument, because it is composed of matter, and matter can act only as it is acted on. The brain and nervous substance are similar in their chemical nature, the chief difference between the white and gray portion is in their structure; the former being composed of fibres alone, the latter containing in addition to the nerve fibres, interstitial matter and nerve cells. They contain eighty per cent of water, the solid matter consisting in part of a protein body in part of a body, which by the action of acids yields products similar to the yolk of an egg; a fatty crystalline acid which contains nitrogen and about one per cent of phosphorous, named cerebric acid; cholesterine is also present, and an oily, fat-acid containing phosphoric and oleic acid. Now what is there, singly or combined, in these substances which could possess the power "to will, to act, to think?" For you may mix them all in the proper proportion, yet you cannot form organized brain substance. But were it possible to accomplish this feat, think you that it could

be made to perform the act of cerebration? No, for as it is matter, it can only act as it is acted on, and would lack the presence of that "capacity," of that "force," that something created in, independent of, though having an extrinsic dependency on matter for its compound life with the body (depending upon the nervous system for the transmission of sensations), and which vitalizes and controls it. Just as a stream of oxygen and hydrogen gas, having a strong affinity for each other may be mingled with impunity, but the mere presence of a spongy platinum will cause them to combine though the platinum is not changed in the slightest degree. This something incased in matter is the platinum for our body, and so long as it remains and the chemical elements are supplied, just so long it performs its katalic office, and the force thus generated acts as motors for our various vital processes. It is true that under certain circumstances we can take the human machine after the katalic entity has taken its flight, and by inducing artificial respiration molecular life will remain for a limited time, but this result is obtained by the exercise of an external, as before it was due to an internal force, both generated, however, in the same way; but that something created for it, we call life, can never be recalled, the somatic death removed, or the once intelligent being be made to respond in this world to our inquiries. Volition, regarded as the effect of chemical combinations in the same quantity, produce results as different as the school-girl's composition and the masterpiece of a Mozart; a Raphael's conception of the Madonna and the daub of a sign painter. No quantity or quality of brain-matter ever generated a true idea or a false one—matter does not think, it does not feel. And how an impression upon the periphery of a nerve becomes transformed into a sensation is, as Prof. Huxley remarks, utterly unknown to us, and still more obscure is the character of self-conscious intellection.

Finally, as materialism is the study of matter and its properties, it is essential for a materialist to be a chemist as well as a physiologist in order to investigate the subject intelligently; yet how few of the members of this school possess these necessary requirements. Justus Von Liebig in "Chemische Briefe" 1865, p. 104, says of this class: "The same charlatans in natural science (like our Ingersoll) who know not what a fever or an inflammation is, or how the blood is produced, or to what purpose the bile is * * * want to make the credulous public believe that they can explain the origin of thoughts, the nature and the essence of the human spirit." Chemistry informs us that every living thing in nature depends for what it is upon that which it is not. It shows among a host of other things, that C4, H8, O2, with the atoms grouped differently, produce the disagreeable smell of rancid butter, and the agreeable odor of ripe apples; C6, H5, O5, for like reasons form the different bodies, sugar, starch and wood, but the force that grouped them remains an unknown factor. It answers the question, what is the quantity, quality, arrangement and mechanism of the atoms which give form to animals and plants from conception to maturity and death; but it is utterly unable to explain why, what, or from whence came that mysterious, microscopic atom of energy the presence of which gave birth alike to the giant oak, the modest blade of grass, the huge mastodon and the infinitesimal infusorium. It speaks to us of design, not to be misunderstood, when it shows that every organic and inorganic substance is composed of an undeviating combination of atoms, held together by a force not inherent in any one or the combination; for if we reduce an organic substance to its ultimate atoms, collect the oxygen, hydrogen, carbon, and nitrogen, etc., we are incapable of putting it together again, because we cannot generate the life-force which originated it. Chemistry tells us the composition of common salt, but it cannot explain why this healthful compound is formed by the union of two deadly poisons. The physiologist has located memory and the reception points in the brain of man of that stimulus which induces many of his volitional acts; but what it is that retains and reproduces—that wills—it cannot solve. Physiology furnishes the proof that growth and decay, waste and repair, is simply the process of secretion and excretion, or a chemical endosmotic and exosmotic action; but how the atoms should be so grouped as to form a microscopic thread of matter containing all the necessary foundation stones upon which to build a little image of the animal within whom it was deposited with all its varied and intricate organs, is a physiological enigma, nor have we any data for speculating as to its origin. It has demonstrated that the functions of the nervous system is to associate the different parts of the body, as well as inform us the interval of time when stimulus applied to one organ will excite activity in another; but it is arrested when it attempts to explain what it is that appreciates the character of the impressions received. Therefore, we reason: If the faculties of memory, gratitude, love, hate and pride, the power of self-control, of looking into the future as well as the past,

of reasoning from cause to effect, is simply the effect of chemical combinations, then the same physiological properties of the hemispheres of the brain in man should be reproduced in the lower animals, as well as all organic substances where the same process is constantly at work, and upon which their growth and existence depends. But the absurdity of such reasoning is shown when we see that, although the chemist has determined with the utmost accuracy of what elements the proximate constituents of plants are composed, and by what proportions by weight, he has never yet succeeded in reconstructing these constituents from their elements. We cannot imitate, by art, the workings of nature in living plants, as we can do most perfectly in inorganic chemistry. Certain it is that if the act of volition is due to molecular life, then, as this does not cease at the moment of death, but can be maintained for a limited time thereafter, then, while the cause remains the same effect should manifest itself; but the fact that with somatic death they cease, proves that it is not consequent on or dependent upon chemical change, but is distinct from it; in other words, it is dependent upon some departed superior force or cause. Thus we have travelled from a scientific path to say what matter and the mind is not; what they are in their essence will ever remain a mystery. We also see that the materialist is encompassed with fears and doubts unknown to the christian; and if, as Haeckel claims, "the theory of creation is a blind belief," how much more so is that of materialism, ("the scientific theory of evolution"). In the former, we follow a bright ray of light, while the latter is impenetrable darkness.

In conclusion, then, we have discovered that the organic portion of all living organisms is formed by chemical combinations, induced by a katalic something, and governed by immutable laws by which the atoms of matter are so arranged as to give the distinctive form and size in accordance with the microscopic foundation of the sperm model deposited in its proper creative receptacle. We know that chemical combinations do not, nor can they be made to, give origin to life in any of its phases, and therefore, in accordance with an axiom in reasoning, we conclude that this must always have been the case. And as matter cannot bestow upon its combinations that which it does not possess, that organic life must be consequent on and dependent upon that which gave it birth—something not matter—hence the materialist should change his name as well as his field, as he must exclude matter in his search for psychical properties and action. That there ever will be unsolved problems in nature is evident, for our very salvation depends upon them. The world is made up with mysteries, and can your conception picture a world without them? This is the field for mental exercise, and without them there would be an intellectual and moral retrogression that would leave us but little removed from the beasts of the field; hence the omniscient wisdom of mysteries. The desire to be wiser and greater than others is what actually makes us so. It is natural, it is laudable to try and unravel the tangled ends in order to find out the way to unfold to our vision one of nature's secrets; and when success crowns your efforts, be assured you will always find that the cords are woven and wound in the same smooth regular style which ever marks the works of an Infinite Creator—simplicity in construction, perfection in design.

To all those who believe that we are merely the acme of vegetable life, and that all which goes to make the man returns to dust again, and with its disintegration aids in the formation of other organic substances, I can but offer my sympathy. To me, one of the most comforting things in life, while passing o'er her stormy sea—one of the greatest incentives to live, is to prepare the immaterial something, that spiritual being with which we are endowed, for the enjoyment of that promise made by Him who "spake as never man spoke," by following as far as possible His code of morals which has been admired and followed by the brightest intellects for over 1800 years. He assured us that those we hold in love's embrace, when earthly scenes are o'er, shall be borne to a home where care is unknown, and where, in unselfish love, we shall be united again forever. With this hope in view,

> "Who would not try to win a heaven,
> Where all we love shall live again?"

Certainly to my mind, it proves, beyond the shadow of a doubt, that there exists within us something more noble, more beautiful and more elevating than a mere material substance, or anything that could be generated from it. It seems to me that I could be a scientist and a Christian also, for they both should go hand in hand. Science is the spur which urges us forward; religion is the curb that keeps us from going too fast. I know that I can accept all that science knows, and yet believe that I am a spiritual being, as well as the truth to which the great Napoleon gave expression when he exclaimed: "I know men, and I tell you that Jesus Christ was not

a man." I thank God that I can exclaim with Moore:

"There's nothing bright above, below,
From flowers that bloom to stars that glow,
But in its light my soul can see
Some feature of the Deity.

"There's nothing dark below, above,
But in its gloom I trace Thy love,
And calmly wait the moment when
Thy smile shall make all bright again."

CLINICAL LECTURE.

EXTERNAL URETHROTOMY—REMOVAL OF TUMOR OF THIGH—FISTULA IN ANO.

Delivered at the New York Hospital by

GEO. A. PETERS, M. D., Attending Surgeon.

EXTERNAL URETHROTOMY.

CASE I. E. C., aet. 42. Admitted Jan. 6. Gives no specific or rheumatic history. Twenty-four years ago he had his first attack of gonorrhea. Four years ago he noticed frequent and painful micturition and gradual narrowing of his stream. The stream grew more and more narrow and twisted, and the urine markedly diminished in quantity. He was examined by his physician at that time, who told him he had a stricture, but never treated him. Six days ago he noticed pain and swelling in the perineum. Three days previous to admission the swelling ruptured and there was a passage of pus and urine through the opening. He then had ulceration and formation of an abscess opening externally into the perineum. The urine has continued to flow through this opening ever since, although he never had complete retention.

On examining this patient it was found that a No. 30 bougie passed up $\frac{1}{4}''$ when it met an obstruction.

No. 24 bougie meets an obstruction at $1\frac{1}{2}''$.

No. 22 meets an obstruction at $2\frac{3}{4}''$.

No. 20 meets an obstruction at $3\frac{1}{4}''$.

Nos. 18 and 10 meet obstruction at same point as No. 20.

The meatus was divided so as to pass a fair sized instrument. The stricture was divided with Otis' urethrotome at $3\frac{1}{2}''$ and a thirty bougie-a-boule was passed easily into the urethra.

Operation.—The patient was put in the lithotomy position aud whalebone capillary bougies were passed into the urethra until one passed into the bladder, and upon this as a guide, the operation of external urethrotomy was performed. After entering the bladder, the other urethral strictures were divided by the urethrotome.

REMOVAL OF TUMOR OF THIGH.

CASE II. Patient is a male, aet. 48. Gives no specific or hereditary history. Two or three years ago he fell down stairs, striking his buttocks quite severely upon several steps. It was not till eighteen months ago that he noticed a slight tumor upon the posterior aspect of the thigh. This did not increase rapidly in size nor give rise to much inconvenience, his only complaint of pain being along the posterior portion of the right thigh.

On examination we find a swelling occupying the situation about 2″ below the tuberosity of the ischium beneath the fascia lata, and possibly connected with the biceps muscle. This swelling is about double the size of an ordinary hen's egg. Its attachments are much greater than we supposed, and its nature from the comparative slowness of growth and situation, would apparently lie between a fibrous or sarcomatous tumor.

An Esmarch bandage was applied, but had to be removed as the pressure upon the posterior vessels was too great. An incision of nearly six inches in length was then made upon the posterior surface of the thigh. Sometimes these tumors arise from the sciatic nerve and tend to give rise to severe pressure effects upon that nerve. Some years ago a tumor was removed at the Roosevelt hospital, and section showed that it was attached to the anterior part of the sciatic nerve, four inches of which were removed along with the tumor. There resulted, however, a restoration of nerve power.

This tumor seems to be unattached to the nerve, lying inside of its course. It is attached to the upper portion of the tuberosity of the ischum in the ascending ramus and curves somewhat around the sciatic notch. Here it was detached with great difficulty. The sciatic nerve remained uninjured.

The tumor on removal weighed a pound and measured seven inches in its longest diameter.

FISTULA IN ANO.

CASE III. History. Male, aet. 30. Three years ago he noticed pain, which became throbbing in character, in the right side of the anus. A swelling appeared soon after which discharged a little pus and caused very little inconvenience.

This, gentlemen, is the general history of cases of fistula. A lump appears inside of the anus. After a time matter forms and

there is no further trouble for a few days, when the patient suddenly finds that something comes through an opening ½″, 2″ and 3″ long. A probe sometimes passes 3″ and 4″ into the cellular tissue alongside of the gut, and frequently the intestine hangs like a purse. At other times it is small. The source of the inflammation that precedes the abscess is sometimes a foreign body like an apple seed or fishbone. Sometimes violence is the cause of a fistula.

In this case I find the abscess small and the probe passes in less than an inch. I also find that there was a sinus extending further up alongside of the gut.

The track will simply be laid open through an external and internal opening. I have sometimes gone as far as 4″ without any difficulty.

The operation consists in first introducing a steel sound and going to the bottom of the sinus. Then introduce a wooden instrument known as the director, and divide the skin and sphincter covering the fistula.

The after-treatment consists in stuffing the wound with carbolized lint and applying a T bandage. This is renewed every day or two. After the first two or three dressings you can depend upon passing the finger into the rectum and breaking down the adhesions, and thus obliging it to heal.

BULLETIN OF THE NATIONAL BOARD OF HEALTH.

September 30, 1885.

The following abstract from Consular and other reports received at this office since the date of our last Bulletin is respectfully transmitted for your information:

Montreal, September 23.—Two hundred and thirty-five deaths from small-pox. No report of number of cases. From September 21 to 23 inclusive there were 31 deaths from small-pox in four municipalities adjoining Montreal.

Three Rivers, September 19.—Five cases of small-pox—disease increasing.

Toronto, September 19.—But one case of small-pox in the city.

Toronto, September 23.—Free from small-pox.

Cardenas, Cuba, September 12.—Free from epidemic diseases.

Matanzas, Cuba, September 23.—Free from epidemic diseases.

Nassau, N. P., September 19.—Free from epidemic diseases.

Guayamas, Mexico, September.—Consul reports September 23, yellow fever in Sonoria. September 1–23, 138 cases and 36 deaths.

The disease has also reappeared in Hermosillo. September 7–23, 12 deaths. At Ortiz station several deaths from yellow fever have occurred among the soldiers.

Vera Cruz, September.—Consul reports September 8, yellow fever still prevalent. Mortality about 50 per cent.

Laguayra Venez., September 5.—Free from epidemic diseases.

Carthagena, Colombia.—Consul reports September 28, that cases of yellow fever have occurred at intervals during the past three or four months. Masters of vessels for ports in the U. S. generally decline to take bills of health.

Callao, Peru, August 22.—Five cases of small-pox.

Paris, France, September 5.—Five deaths from small-pox.

Paris, France, September 12.—Seven deaths from small-pox.

Bordeaux, France, September 12.—Seven deaths from small-pox.

Marseilles, September 7.—Cholera reported at Cette.

Cadiz, Spain, September 5.—Cholera officially declared September 3. Average weekly mortality about 40. During the week ending September 5 mortality 147—increase attributed to cholera.

Gibraltar, Spain, September 5.—Five cases and 5 deaths from cholera. During twenty-four hours ending on September 6 no new cases were reported.

Santander, September 10.—Cholera decreasing.

Genoa, Italy, September 10.—Two cases of small-pox.

Rome, Italy, by telegraph September 2.—Four deaths from cholera 9 miles from Genoa, and 5 deaths from same cause 50 miles north of Naples.

Leghorn, by telegram September 25.—Three cases and 1 death from cholera at Pontrenuli, province of Carrara.

Palermo, September 24.—One thousand two-hundred and seventy-nine cases and 780 deaths from cholera to date.

Venice, by telegram September 22.—Five cases of cholera on 21st, in towns on banks of the Po.

Trieste, Austria, September 8.—Twenty-six cases of small-pox. Disease increasing, 4 deaths from small-pox.

Zurich, September 5.—Four deaths from small-pox.

St. Petersburg, August 29.—Eight deaths from small-pox.

Warsaw, September 5.—Three deaths from small-pox.

Calcutta, August 15.—Sixteen deaths from cholera. 3 from small-pox.

Columbia, Ceylon, August 3.—Cholera reported in native town.

Shanghai, China, August 14.—Cholera reported among the natives.

Shanghai, China, August 21.—Cholera continues among Chinese in settlement and city. One death among the shipping population.

PROGRESS OF THE CHOLERA IN SPAIN, AUGUST 17 TO 27 INCLUSIVE.

PROVINCE.	Cases.	Deaths.	Per ct. Mortality
Albacete	1781	613	34.4
Alicante	1173	439	37.4
Almeria	3364	1004	29.8
Badajoz	26	8	30.8
Barcelona	965	479	49.6
Burgos	343	97	28.3
Castellon	1258	393	31.2
Cindad-Real	1226	451	37.6
Cordova	1346	484	35.9
Cuenca	2885	886	30.7
Geronda	365	112	30.7
Granada	7228	2822	39
Guadulajara	410	165	40.2
Huesca	1123	227	20.2
Jaen	601	305	50.7
Lerida	1202	414	34.4
Logrona	967	286	29.6
Malaga	875	281	32.1
Murcia	1471	519	34.6
Navarra	4572	1089	23.9
Palencia	980	171	17.4
Salamanca	114	41	35.8
Segovia	389	118	30.3
Soria	948	248	26.1
Tarragona	876	246	28.1
Teruel	3587	1087	30.3
Toledo	1854	618	33.3
Valencia	1177	453	38.5
Valladolid	2620	754	28.8
Zamora	1444	164	11.4
Zaragoza	7166	2328	32.5
Madrid	1449	554	37.5
TOTAL	55785	17856	
Prev'ly Rept'd	159173	63640	
Total Rept'd	214958	81496	

Very respectfully,
W. P. DUNWOODY, Sec'y.

—Prof. Milne Edwards died in Paris, on July 29th, in the eighty-fifth year of his age.

CORRESPONDENCE.

NEW YORK LETTER.

NEW YORK, Oct. 1, 1885.

Editor Review: The fall season has now fairly opened, all the medical institutions being fully under way, and the various college and hospital clinics receiving their full quota of patients. The health of the city remains excellent. Not for many years has a summer been passed so free from epidemic disease. One case of yellow fever was discovered some time ago, but prompt sanitary measures prevented any spread of the disease. A few cases of small-pox were reported about a fortnight ago, and one or two deaths have occurred from the disease at the Riverside Hospital. There is, however, no real outbreak of the disease.

A recent article in one of the daily journals reviews the question of the pay of Gen. Grant's physicians. Dr. Douglass has presented two bills —one was before the patient's death, and one after. The first was for services up to May 1st, and was for a sum "much less than three thousand dollars." The second one was for services rendered during May, June and July. Dr. Douglass stated to the reporter, "In June and July, I gave up my entire practice to attend the general at great loss to myself, not only temporary, but permanent. * * * I did not want to render any bill, but, as it was insisted upon, I simply sat down and figured up how much I had lost on the average by being compelled to give up my practice, and sent in my bill for that amount. It has been stated that each of Gen. Grant's physicians received $10,000. I can only say that my bill for the whole time falls far short of this amount."

The records of the late Dr. Willard Parker on the subject of cancer have recently been published. The subject is considered purely from a clinical standpoint, and a list of nearly four hundred cases of mammary tumors is given. The correctness of the diagnosis of some of these cases is debatable, as very few surgeons at the present day would feel sure in certain cases unless the histological nature of the tumor was considered. Dr. Parker's views on the relation of the frequency of cancer to the development of modern life and civilization are full of interest, and will, doubtless, be widely read, as the experience of the author dates back to over half a century ago. The book is edited by Dr. Willard Parker, Jr.

The second meeting of the Pathological Society occurred on the evening of Sept, 30. A specimen was presented by Dr. W. P. Watson, of a section of the penis, amputated for epithelioma. The pa-

tient was a man forty-nine years of age, who had always suffered from phimosis. At about the age of thirty he was accidentally wounded in the glans, and considerable hemorrhage followed. A year later a large, bright red wart appeared below the frenum and was removed. (The man had been circumcised after the first hemorrhage.) This growth reappeared, and hemorrhages again began to occur. Amputation was then successfully performed, and the tumor was found to be epithelioma. There was no enlargement of the inguinal glands and the man made a good recovery.

The president, Dr. Wyeth, remarked that he had seen several cases with a similar history, and that in all cases of cancer of the penis phimosis was, in his experience, always present. This view was concurred in by all present, and held to be another most important indication for the operation of circumcision.

Dr. L. Waldstein presented a specimen of abnormally long vermiform appendix (measuring sixteen centimetres), removed from a cadaver at the German Hospital. Its direction was upward, and it was bound to the hepatic flexure of the colon by peritoneal adhesions.

The County Medical Society held its first meeting on Monday evening, Sept. 28, at the hall of the Academy of Medicine. The nomination of officers to be voted upon at the October meeting was the first business. The present officers were unanimously re-nominated. They are: President, Dr. Daniel Lewis; vice president, Dr. Lawrence Johnson; secretary, Dr. Wesley M. Carpenter; treasurer, Dr. O. B. Douglass. For censors several nominations were made.

The first paper of the evening was read by Dr. A. F. Currier, and was a continuation of two papers published by him in the New York Medical Journal, on January 8 of the present year, entitled "Gonorreha in Women." Dr. Currier gave a resumé of the literature of the subject, particularly in reference to the work of the last few years. He attached great importance to the gonococcus, holding that its presence or absence was the only positive distinction between specific and simple vaginitis, though admitting that there were often decided clinical differences between the two. He thought that the question had a medico-legal value. In view of the serious complications of the disease, he thought that the social evil should be placed under medical surveillance. He regarded the presence of the disease as a strong ground for discountenancing marriage. The discussion was participated in by Dr. Hauks, Dr. Ganigues, Dr. Boldt, Dr. Lyttle and Dr. Messinger. All substantially agreed with Dr. Currier in admitting the curability of the disease. The latter had used with excellent results tampons saturated with subnitrate of bismuth in glycerine (ʒi-℥i).

The second paper of the evening was by Dr. Geo. H. Fox, on the "Treatment of Leprosy." He strongly advocated moral encouragement of patients, and thought we often counteracted the effects of our medicines by our gloomy prognoses. He regarded the disease as contagious only to a very limited extent. He had used preparations of strychnia, also chaulmoogra oil—the latter in daily quantities of one dram. He had seen excellent results with the latter remedy.

J. E. N.

ITEMS.

—The number of resignations from among the officers of the proposed International Medical Congress now numbers one hundred and twenty.

—An Illustrious "ten-year man."—At Carbondale, Ill., there once lived a pretentious old quack —"a ten-year man"—by the name of O'Haven, or if not O'Haven, a name the spelling of which began in the same way. One day he lounged into a store where there were several of the more reputable physicians of the town and a literary man. The literary man knew of the ignorance of the quack and concluded to expose it, and to do so inveigled the pretender into a scientific conversation. Turning to one of the more reputable physicians present, our literary friend, with a significant wink, began:

"Dr. R., what do you think of the controversy in the Lancet?"

Dr. R.—"Well; the fact is, I haven't made up my mind about it."

Literary Man.—"But, Doctor, don't you think it strange that so important a question as the position of the liver should not have been settled before this? I have always thought that there was no doubt but that the liver was situated above the diaphragm."

Dr. R. (taking the hint)—"Well, it's not so strange after all. I've seen cases in which it was hard to tell. I confess, however, I have been of the opinion that in most cases, at least, it was below the diaphragm."

L. M.—"The question is certainly an important one, or the London Lancet would not spend so much time and space discussing it. Ah, there is Dr. O'Haven. Doctor, you have had great experience; what is your opinion on the question that appears to be vexing the professional mind?"

Dr. O'H. ("ten-year man")—"Well, sir, that is a question to which I have given a great deal of

attention. From my long study and extensive observation, I have, however, been able to settle the matter beyond all dispute. The liver, sirs, is situated half above and half below the diaphragm!"

This is a true story.—Cincinnati Med. Journal.

—Dr. Chabret's Novel Operation.—Of all modern surgical operations, that recently performed by Dr. Chabret, in Paris, is perhaps the most remarkable. He removed a diseased eye from a young girl and replaced it with the eye of a rabbit. The transplanted eye has accepted the situation, and promises to be an efficient substitute for the lost one. Of course, it may differ in focal length from the girl's original eye, but that is a defect that can be remedied by spectacles.

This operation is apparently destined to put an end to blindness among men. Hitherto the loss of an eye has been irreparable, but if our missing eyes can be made good by the eyes of the lower animals, no one need be without a pair of good, substantial eyes. The supply of eyes which can be made use of for this purpose is inexhaustible, and as the cost of production is practically nothing, the cost of supplying one's self with new eyes will be very small.

Not only can blindness be thus rendered unnecessary, but persons who have lost their original eyes can more than supply their loss. In fact, we can all greatly improve our power of vision by providing ourselves with choice and desirable eyes. The efficiency of the police force would obviously be greatly increased were every policeman to be supplied with a pair of cat's eyes. He would then be enabled to see a cashier or other criminal on the darkest night without the aid of a lantern, while his eyes would be at least as valuable in the daytime as are ordinary police eyes. The eyes of hawks and other far-seeing birds would be of immense advantage to sailors and other persons whose occupation makes unusually good eye-sight necessary, and it is probable that within the next few years no sailor will be able to receive an officer's certificate unless he can prove that he is supplied with the standard marine eye —whether that may be the eye of a hawk, an eagle or a crow.

For purposes of personal adornment the new plan of supplying girls with beautiful eyes is sure to be popular. What man could resist the pleading gaze of a girl wearing a pair of setter's eyes or the eyes of a deer. What could be more attractive than a girl with the eyes of a pink rabbit? The eyes of a Skye terrier would be just the thing for girls who wear their hair banged, and the eyes of an owl would be very appropriate for girls who are fond of moonlight excursions. Of course, the feminine fashion in eyes will change from time to time, and setters' eyes, which may be fashionable next year, may be decided to be vulgar a year later, when peacock's eyes come into fashion. Indeed, it will probably be necessary for a fashionable lady to change her eyes with her dress, and we shall hear disparaging remarks made of this or that girl to the effect that she is wearing the same old eyes that she wore at Mrs. Smith's party last winter.—N. Y. Times.

—Small-pox is epidemic and in a severe form at Montreal.

—Decoction of Lemon in Gonorrhea.—Dr. Rebatel recommends this simple remedy, first suggested by Mannino, and affirms that it quickly destroys the vitality of the gonococci. Three fresh lemons are cut up into small pieces and put into ten ounces of water, which are then boiled down to three ounces. The liqued is then strained and used as an injection repeated three or four times a day. The decoction should be freshly prepared every second day. Instead of this decoction may be substituted a solution of one grain of salicylic acid and twenty-five grains of citric acid in eight ounces of water.—Revista Clinica e Terapeutica, August, 1885.

—Judge Tucker recently gave his decision in the George S. Dunbar case at Pittsfield. The facts and testimony were reviewed at length in the decision. Dunbar was found dead on a lonesome street at ten o'clock on the night of July 4. By his side was a revolver with a long string attached to the handle. A loop on the handle of the pistol could be adjusted to raise the hammer of the weapon to half-cock; then, by holding the revolver in the right hand at the back of the head, putting the string under the right foot slightly raised, drawing it tight with the left hand and putting the right foot down sharply, the hammer would be worked to explode the cartridge. Dunbar was found shot in the back of the head, and there is a distinct mark of the string on the shoe he wore. He was worth in stock of the gas company, of which he was superintendent, and in other securities and real estate, about $19,000. He had borrowed on these securities $22,000, nearly all of which he had lost in Wall Street speculations. His life was insured for a very large amount in regular life companies, assessment companies, fraternal association and in accident policies. Judge Tucker finds that the evidence compels him to believe that Dunbar committed suicide.—Boston M. and S. Journal.

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CORROSIVE SUBLIMATE IN ENTERIC FEVER.

We have presented to our readers on several occasions methods of treatment intended to abort the course of enteric or typhoid fever. Large doses of calomel have been administered to this end, and, it appears from various reliable sources, with the desired effect. Dr. W. Greifenberger presents in No. 38 of the current volume of the Berliner Klinische Wochenschrift, a mode of treatment consisting principally in the internal administration of corrosive sublimate. He regards the method as an improved one to this particular end. Dr. Greifenberger has had great opportunities to treat typhoid fever, and gave the calomel treatment an extended trial. He made the observation in many instances, that after repeated large doses of calomel had been given, no further intestinal evacuations ensued under continued calomel treatment; notwithstanding the desired effect took place, that is to say, the fever was aborted. This led him to the conclusion that calomel does not influence the typhoid fever merely by its qualities as a cathartic. This view was strenghtened by the experience that other cathartics had no such abortive influence. He next had under observation two cases of typhoid, brought about by the consumption of spoiled confectionery, so-called "food-typhoid." There was high fever, somnolence, ileo-cecal pain, arthritic pain and tumefaction of the spleen. All these typhoid symptoms vanished after the calomel that had been administered had become partially altered to sublimate through the accidental ingestion of acid; the result was biliary vomit, severe intestinal colic with retention of stool and salivation. No other medication was had and the spontaneous cure in a brief time was ascribed to the complete disinfection of the intestinal tract by the sublimate after the purgative action of the calomel had emptied the bowels. Greifenberger draws the further conclusion that every success at abortion of the fever with calomel is due to the purgative influence of the calomel in first order, and to the subsequent disinfecting influence of such portions of it that are converted into sublimate by the acidity of the gastric juice.

Following this train of thought the suggestion was a ready one to empty the bowels by any indifferent purgative first, and subsequently secure disinfection by administering corrosive sublimate. Another advantage appears to be that the sublimate may be administered at any stage of the disease without any danger of causing intestinal hemorrhage, which calomel or other brisk cathartics may bring on. The mode of administration is as follows:

℞ Sol. hydrarg. bichlor. corr., 0.04–0.05: 180.0.
Syr. simpl. s. aq. menth. pip, 20.0.

M. D. S. One tablespoonful every hour or two.

About one-half of the above solution may be given in twenty-four hours. Under given conditions a mild infusion of digitalis may be added to the sublimate solution, or morphine be given in addition. The evacuations are to be regulated by castor oil or infusion of senna. While the sublimate is being given it is well to let the patients gargle frequently and feed them with gruel and yellow of egg.

In the cases reported as so treated no intoxication took place, such as emesis, colic or salivation.

The following in brief are the results: The doctor treated in two years about eighty cases that occurred in the course of three lo-

cal epidemics. More than forty were treated with sublimate without a death. In thirty cases sublimate was given after calomel had failed as an abortive. No death occurred in this number. Of thirteen patients treated by the expectative method, three died of perforation-peritonitis, intestinal hemorrhage, epistaxis and edema of the lungs. The thermometer showed that the temperature began usually to sink on the second day, reaching the normal figure on the third day. In one case that came under the sublimate treatment on the sixteenth day, with a temperature of 40.6°, the thermometor showed subnormal temperature on the third day. The sublimate was usually given for three or four days, in which time five to eight centigrammes were used. In more severe cases as much as fifteen centigrammes were administered in eight or nine days.

Together with the reduction of fever the sensorium became more clear, the sordes on tongue and teeth disappeared, the roseola vanished. Intestinal hemorrhage occurred twice in two cases of ambulatory typhoid. Prostration was treated with tinct. of quinine and murcriatic acid, camphor, ether-camphor, etc. These successes prompt Dr. Greifenberger to give the sublimate treatment the preference. The method is cheap and simple, and on this account to be preferred to the mercurial inunction method, which we previously referred to. Dr. G. feels confident that his statements will be fully corroborated by others.

Radical Cure of Inguinal Hernia by Injection and Suture.

In the Section of Surgery at the Annual Meeting of the British Medical Association, at Cardiff, C. B. Keetley read a paper on the above subject, considering also the application of similar methods to umbilical hernia. We quote from the British Medical Journal:

"To what extent are we to credit the good reports of the treatment of hernia by injection which come to us from America and Germany, and what are the best methods of carrying it out? These are the questions I propose to bring forward in this paper.

Bearing in mind that the present great interest in operations for radical cure of hernia is mainly due to the introduction of the procedure of antiseptic excision of the sac, one is tempted to begin with a reminder of the really serious mortality of that plan, by way of excusing oneself for trying another less fashionable one; but such a preface might widen the field of discussion too much.

My own operations for the radical cure of hernia by injection number only eleven, and the first was done less than twelve months ago; so that I beg of you to remember that I am not claiming any value for them, except when considered in connection with the recorded experience of others.

My patients, nine in number, included one man, aged 50, with double inguinal hernia; three young men, between 20 and 30, one with double inguinal hernia; two girls of 11, and three infants, one with umbilical, the others with inguinal hernia. The dates of operation are scattered pretty regularly over the past twelve months, and all the patients have occasionally returned to report progress. One is still in hospital, having been operated on only a fortnight ago.

With regard to final results, the time is obviously too short to give them, but it is well known that, if a good result persist for a few months after an attempt at radical cure, it is more likely to last than otherwise. Now, only two of my cases have so far fallen short of complete success, and those two almost the last operated on. In each of these two cases, no pains were taken to back up the operation by the careful use of a truss. But, in spite of this carelessness, each patient is greatly improved, and herniæ, which used to be almost always down, now only slip down exceptionally. One of these "semi-failures," as they may be called, is a male infant, whose rupture only recurred when he was attacked with severe bronchitis. He was without a truss, because I happened to be on the Continent when he left the hospital, and his mother did not bring him back until the rupture re-

curred. This used to be a very large rupture, almost always down, and coming through a very large ring. I have no doubt that his mother is correct in saying it came down again during the attack of bronchitis, but neither she nor I can now make it come down at will, and I am convinced that the steady use of a truss will eventually turn this failure into a success.

My first case was double inguinal hernia, in a very stout man aged 50. The reason for operating was that his ruptures used to come down at night when he was in bed, and often cause him pain and illness. The patient is an intelligent gentleman, able and willing to second the treatment. The result is a complete, and, so far, enduring success.

Upon the whole, therefore, I am disposed to believe the statements of Janney and Warren in America, that they get seventy or eighty per cent of complete cures.

My only umbilical case, operated on six months ago, remains a lasting success, although it is a child with unexampled powers of howling and screaming. It has been for two months without a truss.

Before describing the course of the cases toward recovery, it would be well to give the mode of operating.

I have not attempted the subcutaneous method. I cannot believe it to be either surgical or safe to thrust into the inguinal canal any instrument sharp enough to pierce the skin, and afterwards to blindly inject an irritant through it. Indeed, serious accidents have attended this proceeding. Warren himself, the chief exponent of "subcutaneous" injection, writes:

"I know of no operation in the annals of surgery that requires a more delicate touch, and finer manipulation in all its detail, or a steadier and firmer hand in the operator, not even excepting the fine and graceful operation of cataract in the eye. What operation demands more care than passing a sharp pointed instrument through the living tissue into the hernial ring, among numerous tissues, vessels, nerves, and surrounded by the peritoneal membrane?"

If this be true, operations such as those of Warren and Heaton stand condemned by their own advocate. Of course, it is not altogether true, but it contains an important degree of truth, half buried in absurdity.

I adopted the method of Velpeau, who conceived the idea of attempting radical cure by injection nearly fifty years ago; only, whereas he used iodine, I use a freshly prepared concentrated decoction of oak-bark. Heaton used this, made from the bark of quercus alba, a tree whose bark is not to be got in England. Warren uses a compound of Heaton's fluid with alcohol, morphia, etc. (see p. 372 of his treatise).

Operation for Inguinal Cases.—The parts being shaved and asepticised, make an incision over the external ring by pinching up skin and fat, and transfixing. The operating-table should slope, with the foot higher than the head, so that the hernia may keep up, and out of the way. Secure any bleeding points with catch forceps. Thrust a probe through the intercolumnar fascia, and pass it up the canal as far as the internal ring, move it about in the canal so as to make a little cavity for the fluid to be injected. Slip a small cannula over the probe. Withdraw the latter, leaving the former. Fit your syringe, ready charged with injection, to the cannula, and inject. Place a finger on the point of entrance of the cannula, and cover that point as you withdraw the instrument. Then, with the forefinger of the other hand, rub over the site of the fluid, so as to diffuse it.

Having got so far, and the parts being exposed, it has seemed to me a pity not to take the opportunity of putting a couple of strong catgut sutures into the pillars of the external ring, and adjacent parts of the canal. Accordingly, ten out of my eleven operations have been compound, including both injection and suture. But, having had some experience of simple suture, I have no doubt in my own mind about the value of the injection.

Dressing and After-Treatment.—These consist of the use of a drainage-tube, suture of the skin-wound, an iodoform pad, and antiseptic packing. The dressings are fixed by

strips of adhesive plaster, and a rubber bandage is put over all. Generally there are pain and a rise of temperature for a few days; an ice-bag is applied locally. The foot of the bed must be raised on blocks; and pillows placed beneath the knees. The horizontal position must be maintained until the parts will bear a truss (about three weeks or a month).

Once there has been suppuration. This was in the last case operated on. A rather large abscess formed. It has been opened and drained, and has healed rapidly.

This patient had an extra quantity of the injection (about a dram) and no drainage-tube was left in. Several of the other patients did well without a drainage-tube.

I hesitate to give a positive opinion about the anatomical changes which take place. There is, at first, the formation of a great mass of thickening, apparently due to serous effusion. After a few weeks, more or less according to the case, this disappears. The ring can then be plainly felt contracted, perhaps to half the size of the ring of the opposite side. Not only does the rupture cease to come down, but there is no longer any hernial impulse.

One of the best cases was the umbilical, an unusually large hernia in an infant. Here the astringent fluid was brushed and swabbed over the parts, before the sutures were inserted. The usual thickening appeared, and I believe that the fluid, as well as the sutures, had a share in the result. This case was exhibited at one of the meetings of the West London Medico-Chirurgical Society.

I have not tried the operation in femoral cases. For these, ligature of the sac is not only effective, but reasonably safe. It is for reducible inguinal and umbilical herniæ, that I believe we are called upon to seek for a safer plan of proceeding than that which involves excising or even opening the sac.

Mr. Edmund Owen (London) thought that it was unnecessary to have operated in the case of congenital umbilical hernia. These cases were due, for the most part, to arrest of development, and were always cured by steady and continuous pressure of a properly applied pad.

Mr. George Brown (London) said he considered the profession much indebted to Mr. Keetley for bringing forward the cases operated upon by him by this revived method of injection, which, in his hands, had been so successful. The operation was certainly a more simple and less formidable operation than the usual one, and he hoped that surgeons would be induced to try Mr. Keetley's method in preference to the serious cutting operation, and he trusted they would meet with as much success as he had done. No doubt, patients would more readily submit themselves to the comparatively safe operation by injection, than face the operating-knife.

Mr. Keetley, replying, said that the infant with umbilical hernia, on whom he operated, had a very large hernia, which was liable to attacks of obstruction."

Surgery in 1885.—The Paris correspondent of the Philadelphia Medical Times writes regarding Verneuil's Address:

"On the 12th inst. the fourteenth session of the French Association for the Advancement of Science opened at Grenoble, under the presidency of Professor Verneuil. His opening speech, taking for his subject "Surgery in 1885," was full of the caustic wit of the veteran surgeon, and conveys some good hints that will apply quite as well in America as in France.

Dr. Verneuil began by saying that some had wished to exclude medicine from the circle of sciences and range it simply among the arts, and against this he entered his protest. He wished to inscribe resolutely among the sciences that portion of human knowledge which serves to introduce us into the world, to keep us here as long as possible, to develop, restore, and protect our organs, rendering great services at all periods of life. In fact, it joins to its own proper merits that of keeping in good health those savants who decry it. It is a singular thing that of all the applied sciences medicine, which is incontesta-

bly the most useful, is the most disputed. It is also the most difficult; but nevertheless everybody thinks himself capable of expatiating on it or prating about it. The art of curing has long been divided into two branches, medicine and surgery. Every century has found some one to deplore this and show its dangers, but they only preach in the desert, for the separation seems to be more and more marked. Plenty of doctors will admit without blushing that they know nothing of surgery, and the surgeons, if they do not proclaim it, prove very often, alas! that they know very little of medicine. All the world are accomplices to this state of things, and they all suffer from it, but no one complains. It is curious, indeed, to see how the world judges of this matter. You will hear plenty of people say that they believe in surgery but not in medicine, and when you ask why, they will answer quite gravely that 'surgery is a positive art, and medicine is a conjectural one; that the first is daily making advances, while the last has not progressed since the time of Hippocrates.' From this homage to surgery you infer that this fine talker will give all his confidence to those who practise it. Not at all. Out of twenty persons to whom we offer our services and our armamentarium, fifteen at least will refuse outright; and if some doctor, some apothecary, or even a simple herbalist, will let them see a possible way to a cure —without operation—by some simple drug, a plaster, or the omnipotent massage, or with the electrical current more or less continued, this convinced apostle of surgery will place himself at once in their hands. Another popular prejudice is the idea that surgical affections can only be cured by violent means —hot iron and fire, in fact, or cold steel—so that the surgeon is often compared to a butcher steeped in blood and carving flesh with immense cuts. Some persons, thinking to be witty, at our expense, call us 'sausage-makers,' without thinking that they are comparing themselves to the porker, the most filthy of the quadrupeds! But it is enough for any one to visit any of our surgical wards to convince himself that the large number of our sick are cured without losing a drop of blood, or even one millimetre of their skins. In fact, of one hundred patients not one-fifth, or at most not one-quarter, have to submit to a real cutting operation.

However, the number of operations proves nothing against their legitimacy. A well-known practitioner operates a great deal because patients who need operating are brought to him in large numbers. The question is not, Does he operate often? but, Does he operate too often? for quantity by itself does not constitute excess. If the abuse of operating be condemned, no one dreams of proscribing the use of it. Let us recognize, however, that some cases treated by operation might have been cured without: for instance, a fracture, for which we amputate, or a white tumor, for which we perform resection. But are we guilty for having amputated or having resected? Not at all, for we have based the operation on probabilities. Conservation offered us twenty chances of safety, but the sacrifice of the member offered forty! So in operating we acted as real conservative surgeons.

Take a case of ordinary gravity, where operation is offered and the patient refuses. He consults elsewhere, and a pharmaceutical treatment is proposed; he employs it, and is cured. We defend ourselves by invoking the usual hopelessness of drug-treatment, and also the length of time (for many patients want to return to business quickly). Then, again, surgeons are often impatient; so that if the patients say 'Time is money,' I suspect the surgeons may murmur in an undertone, 'Operation is also money.' There is only one way to prevent errors of prognosis—that is, for surgeons to do as the public does, proclaim operations to be the ultima ratio, and not perform them until all other means have been tried. Many do not try everything. They content themselves by saying, 'All the ordinary means have been exhausted,' etc. In this they imitate those good people who, to excuse themselves for going to quacks and somnambulists, say that they have been 'abandoned

by all the doctors,' when in reality they have only consulted one or two obscure practitioners, two druggists, and the veterinary surgeon, with perhaps a neighboring nurse. Many a time, when interrogating patients who come to consult me, I have been struck with the insufficiency of the therapeutical means that had been prescribed for them. Often I have sent them to the druggist or the bandage-maker, or even to the sea-side or watering-place, to see them return relieved, if not cured; and I am always proud of these conservative victories.

"Certainly in the material point of view, when the hour of renumeration has come, it is not so fine to see that we are, as a rule, offered only one-fourth as much for having laboriously saved a member as for having quickly cut it off! But then with what great prestige is the surgeon surrounded who never recommends useless sacrifices, and what satisfaction is his when the result justifies his advice! To take only one example: what glory would be his who conld cure cancer without operation! While we are in the humor let us confess that some men operate too much. At certain times and in certain countries, even in our days, the 'prurigo secandi' is a sporadic malady, endemic and epidemic, for which no vaccine has yet been found. In the seventeenth century transfusion was the rage; in the eighteenth, they trepanned any one who fell on his head or who was suspected of having more or less cracked his skull. During the wars of the end of last century and the first of this, every broken member was amputated. When I entered the profession, tenotomy was the rage. They cut all the tendons, all the ligaments, all the muscles in all parts of the body, pretending to cure all sorts of troubles, even stammering and humpback, bandy legs and deafness. Later the 'resection mania' arose. It flourished in England and Germany. When one specialist operated, all operated. When one cut something, all the rest did the same, except a little differently and with different tools. If some day a museum is founded of instruments, what immense glass cases will be needed to contain the lithotomes, urethrotomes, hysterotomes, and other machines in tome, including those little instruments—not named I think—which are intended to cut the stenosis of the nasal canal! These contractions hardly ever exist, by the way, and when they do they don't need to be cut.

"Gynecology and ophthalmology are disputing the place of honor on this new turf. I believe that success is with the first. Lately, for instance, independently of cauterizations, so often of no use, we have seen Emmet's operation, as well as Battey's, Hegar's, Alexander's and many others. In fact, a gynecologist risks passing for one having no merit if he doesn't produce a series of operations.

"The facility with which certain practices become popular is surprising. For instance, the 'raclage' or 'rugination' (scraping) of cold abscesses. The theory can be sustained, but it seems more prudent to rely on experience. For this we must wait; but the present generation won't do so. So they 'racler' away, even penetrating to the spinal canal in doing so; and, notwithstanding the operation gives 'encouraging results' (that is the usual expression), the poor patient goes to join his ancestors in a better world. A present mania consists in applying the actual-cautery points to all external affections. This has succeeded to sinapisms and blisters, which are quite as good, but the cautery has the advantage of having a striking, 'mise en scène' that shows off well. It is feared by children, and is not the joy of parents. These things may be useful, but they are abused in use. There is too much transfusion, too much trepanning, too much tenotomy, too much resection, too much excision of the iris, too much work done in the pelves of women, and entirely too much promenading of thermocautery on man's poor body. A great deal has been done of late years in the way of extirpations of the larynx, the pharynx, the kidneys, etc. What has been the result? At most, ten per cent cured. For those ten the operation has been of use to a greater or less degree; but what of the ninety others? Can abuse be denied?

"Another trouble with the people is that they want to be assured that their malady will not return; as if a gardener who pulls up the weeds can say they will not come back. Again, they will say, 'Oh, I won't go to Verneuil (they suppress Doctor or Monsieur for any one who is known), 'because he won't do enough.' A mother, one of my former patients, can't bear to hear my name, because I advised her daughter to use crutches instead of operating. This discourse might be called 'The Confessions of a Surgeon;' but I don't wish to present my personality. I simply love truth, and I am not afraid to tell it. For a long time I have repeated constantly, 'Surgery is not what a vain people think it is,' and I add to that this remark, 'Surgery is not that which surgeons themselves make it.' It is this that I wished to represent to you to-day. To the world I would say that they are wrong to consider surgery as a narrow specialty, a sort of precise trade, like clock-making, for instance; also, they are wrong to insist on surgeons having that infallibility that constructors of machinery have; again, they are wrong to put their acts in contradiction to their words by judging lightly those things for which their incompetence is notorious. On the other hand, I wanted to say to my brothers that, if they wished to be classed with true skilled workers and not remain artisans, they must make light of their ability, take little credit for success in operations, but follow, above all, the therapeutic method, that is to say, definite cure in the true sense sense of the word. Refuse all suggestion of being specialists, and remain modestly within the circle of general medicine. Be, above all, pathologists; extend your knowledge in etiology; try to perfect yourselves in diagnosis and prognosis; and be convinced that the maximum of cures will come to him who is the best educated and the wisest. Naturally you will follow the supreme end of medicine, cure of your patients, but you will use more care in the means of cure, prouder of being classed with therapeutists than with operators. You will only arm your hand at the last extremity, after having loyally tried all nature's remedies; when convinced of the impotence of all the hygienic and pharmaceutical agents; when the necessity of intervention is proved. Then always decide for the least dangerous of operations: 'actum minoris periculi.' This may be the most radical, the most destructive in appearance. But we know that in certain wounds of members, for instance, amputation done quickly and high enough is ten times more conservative than resection; that for stone, lithotrity is less dangerous than cutting; that ovariotomy is more benign than multiplied injections of iodine. I propose this rule for young practitioners: When they have to decide between rival operations, put in the first rank, efficacy; second, gentleness; third, facility. Always know how to refuse an operation. But you will say, 'But my neighbor will operate.' Well, let him do so. Most likely it will be a failure. He will pocket the sesterces, but you will gain the esteem. It's not much, some will say. It's a great deal, other's will think, who assimilate medicine to the most sacred things, and repeat, with the poet,—

'Art is saintly. God made it so that in the world,
Everything should not bend before power and gold."

"To furnish the world with honest surgeons is my design. It is all the same to me to hear that in London, Vienna, or New York they operate more and better than they do in Paris, so long as they add that in the last city they cure oftener and kill a little less.

"'Happy the people who have no history,' has been said. Happy will be the surgeon who has no operating-case, and who knows how to do without it. I hope one day, thanks to progress, that surgery may cease to shed blood and to cause tears to flow."

A Rare Malformation of the Heart.—George E. Brewer, M. D., writes in the Boston Medical and Surgical Reporter on a case of congenital malformation of the heart, which recently came under observation, furnishing an example of a condition, interesting in its rarity:

"On July 20, at the Columbia lying-in hos-

pital in Washington, a healthy colored woman was delivered of a male child. At the time of birth the child was cyanosed, and it was only after the employment of artificial respiration and various other stimulating measures that respiration was established. The child lived fifty-four hours, during which time, embarrasment of respiration, rapidity of pulse and great restlessness were constantly observed. The efforts at nursing were feeble and without result.

At the autopsy the heart alone was removed and preserved for subsequent examination. The lungs and abdominal organs were examined in situ: the former were well aerated, and the latter presented nothing abnormal. Upon later investigation the heart was found to consist of three cavities, two auricles and one ventricle. The auricles were well formed but of unequal size, the left being considerably enlarged. The septum was present and and exhibited nothing abnormal except the large size of the foramen ovale, which admitted the tip of the little finger. There was but one, the left auriculo-ventricular opening. In place of the tricuspid valve there was a slight depression at the bottom of which was a minute fibrous ring, 3 mm. in diameter. This was impervious, and an opening made through it in search of a rudimentary right ventricle, revealed nothing but the dense muscular tissue of the ventricular wall.

The ventricular portion of the heart did not differ in size and external appearance, from normal specimens of the same age. The walls were somewhat hypertrophied, measuring 9 mm. in thickness. Its cavity was spacious and presented no trace of a septum; from it was given off one large arterial trunk, the aorta. A small vessel, blindly originating at the junction of the anterior wall of the aorta with the ventricle measuring 3 mm. in diameter, bifurcating 8 mm. above its origin, was observed, and considered by Dr. D. S. Lamb of the Army Medical Museum to be the rudimentary pulmonary artery. As the autopsy was necessarily hurried, further investigation, with a view of ascertaining the origin of the vessels supplying the lungs was not undertaken.

Examples of trilocular hearts are by no means common. Peacock, in 1858, had collected but eleven, and the American and British journals, published since that time, furnish an additional record of seven cases. Most of these, however, are examples of an arrest of development taking place at a period of fetal life, much later than the case which is now under consideration. Evidence of this is to be found in the fact that in nearly every instance a rudimentary ventricular septum is present, and the pulmonary artery, in a more or less complete state of development, can generally be found to communicate with the ventricle.

Of the few cases which closely resemble this one, can be mentioned the one reported by C. Bernhard, in which there was entire absence of auricular septum, right ventricle and pulmonary arteries; two cases (reported by Owen and Vernon) in which there was absence of left ventricle and aorta, the auricular septum being defective; and the case described by Dr. Heinman in the Medical Record of 1878, which consisted of two auricles and one, the left, ventricle. The aorta being well formed and the pulmonary artery rudimentary and impervious.

Although the specimen exhibits three distinct cavities, considered from a physiological point of view, it should be classed as a bilocular heart, inasmuch as the right auricle, having no connection with the ventricle, serves only as a common venous trunk.

The question of causation in these malformations, is always one of interest. The theory usually aceepted is that defects in the septa are generally secondary, and result from a more or less complete stenosis of some valve or vessel; that is, in nearly every instance, is present on the right side of the heart, and may be the result of irregular development or an inflammatory process.

Although it is not my pnrpose to enter upon a discussion of this branch of the subject, it may be added, that the small fibrous ring which was observed in place of the tri-

cuspid valve, probably represents a stenosis of that orifice, occurring at a very early period of fetal life."

THE TREATMENT OF PATIENTS AFFECTED WITH DISEASE OF THE PROSTATE.—The American Journal of the Medical Sciences thus reports on a communication to the Annales des Maladies des Organs Genito-Urinaires:

"Dr. Guyon, holding that the normal physiological condition of those affected with prostatic disease is congestion, formulates the following treatment for the affection:—

1. The avoidance of all causes of general or local chill.

2. The proscription of over-eating and alcoholic excess, and in general avoidance of abuse, rather than the simple use of salads, meats, fish, shell fish, white wines, and champagne.

Not only should excess of irritating or alcoholic drinks be avoided, but also that of beverages in themselves inoffensive. For this reason the treatment of the affection by mineral waters should be advised with extreme caution.

3. Voluntary and prolonged retention of the urine should be avoided, as being conducive, in those affected with prostatic disease, to the production of retention, cystitis, etc.

4. Moderate indulgencies in sexual intercourse.

5. Consideration of the unfavorable influence exerted by prolonged horizontal decubitus and immobilization.

Prolonged rest in bed should be avoided, and before retiring, the patient, if possible, should, if unable to walk in the open air, promenade in his room for fifteen or twenty minutes, and in the morning such exercise should be repeated.

During the day sedentary habits should not be contracted, but at the same time fatigue should be avoided.

Constipation should be obviated, if existing, without the use of drastic cathartics. A large enema, warm or cold, in the morning exercises at the same time an evacuating and a soothing effect. Emollient enemata, before retiring, frequently aiso yield good results.

6. The function of the skin should be excited by dry friction and massage.

Baths should not be continued beyond fifteen minutes.

Dr. Guyon next considers the medicinal treatment of the affection and suggests—

1. As a remedy for the sclerosis of the urinary apparatus, the use of potassium iodide in quantity varying from eight to fifteen grains daily, during fifteen days or three weeks of every month, and continued for months or years.

2. For the congestive lesion, the careful administration of ergot, nux vomica, and all preparations containing strychnia as a base, is advised.

3. As remedies for vesical irritation, belladonna, hyocyamus, and the preparations of valerian will be found more offensive than opium and its derivatives, but nevertheless sufficiently active.

The bromides are considered to have in vesical disease only an insignificant effect, but in some cases this should be utilized.

The foregoing hygienic and medicinal treatment, Dr. Guyon considers, will, in most instances, suffice to overcome the functional disturbances experienced by prostatics, and only when it fails should the use of the catheter be resorted to."

SENILE CHANGE IN A YOUNG MAN.—Prof. Rossbach thus writes in Deutsches Archiv. f. Klin. Medicin, (Medical and Surgical Reporter):

"The patient, 18 years old, had, in the course of two and a half years, acquired the look and appearance of a man sixty years old. No hereditary, no predisposing cause could be made out for the "illness," which had commenced when the patient was fifteen. A "thickening" of the skin of his face was first noticed by his friends; this thickening is said to have increased gradually, and, finally, numerous folds and wrinkles had formed in the skin of his face. The process had spread gradually from the skin of the face to the neck,

then to the chest and the abdomen. In the upper as well as in the lower extremities, which latter had still an almost normal skin, the process had only commenced. Otherwise, the patient had felt completely well. The patient was a well-developed, strong, muscular man, and he presented, with the exception of his skin, nothing abnormal. The skin felt velvety soft, dry, or moist, according to external conditions. It had a peculiar, highly disagreeable odor, in spite of frequent baths. The face of the young man had assumed a thoroughly senile expression, giving him the appearance of a man sixty to seventy years old. Still, the color of his face was healthy and rosy, and seemed rather inclined to blush. Particularly remarkable were the large, deep folds and wrinkles of the skin of his face. The upper eyelids were prolonged, and had sunk down, the conjunctiva itself seemed also too wide and formed folds, so that the lid stood ectropically from the eyeball, and this was caused simply through an enlargement, not through a thickening of the conjunctiva. Around the eyelids were numerous folds; the eyeball itself looked fresh and clear. The nose was broad,and the skin covering it loose, the lips large and broad, their mucous membrane also enlarged. The external ears were large, their lobules prolonged and folded. From all parts of the face the skin could be lifted up into folds, in a length of 1 cm. over the forehead, of 0.5 to 1.5 cm. over the nose, and of 4.5 cm. over the cheeks.

The mucous membrane of the nose and the mouth, the teeth and the hair showed no alterations; the beard had just commenced to grow. The skin over the rest of the body, excepting the legs, was everywhere loose, and, apparently too wide, and was laid up into folds, folds forming around his shoulders and over his abdomen. These folds could be lifted up in heights varying from 3 to 6 cm., and they remained standing some time before going back spontaneously. Sensibility seemed normal, the point and head of a pin were distinguished, differences in temperature were made out to half a degree, and there was no paresthesia. The skin and subcutaneous tissue appeared everywhere of normal temperature, excepting for their loss of elasticity. But the skin seemed to have grown too wide for the body which it had to enclose, or it appeared as if it had grown alone, and the rest of the body had remained too small for it.

Rossbach supposes that the cause of this peculiar alteration of the skin has to be sought in the central nervous system, thinking that the centres which preside over the growth of the skin were in a state of increased activity."

Milk Curd.—Before the Obstetrical Society of Edinburgh, according to the Medical and Surgical Reporter, Dr. James Ritchie showed several specimens of milk curd, which he had curded under various conditions, and he had found the results so interesting, and in some cases so unexpected, that he thought the Fellows might like to see such specimens even although the experiments are very crude and not to be compared with what we see done for us by nature in the stomach of the child. All the specimens of milk had, after mixture with various substances, been treated in the same way, viz.: they were heated to 98.0°, a small quantity of common salt was added, then essence of rennet, the mixtures were stirred, then left in the water-bath at about 98.0° for half an hour. After some hours the curd was broken down, and when the whey separated it was filtered off. Pure milk showed a very hard curd in large masses. The dilution with water causes the curd to be considerably softer, and specimens diluted with an equal part of water show a softer curd than those which had only a third of water added. The acidulation of the milk and water with 0.02 per cent of dilute hydrochloric acid causes the curd to be much harder. If, therefore, a child's stomach, in an irritable condition, secretes very acid gastric juice, the curd of milk and water will be a hard one. The addition of farinaceous gruels (oatmeal, barley-water, and rice-water) in the proportion of one-third, causes the curd to be in small soft flakes, and it is very noticeable that if such mixtures be acidulated, the curd is not much harder. The effect of

boiling the milk is very marked—the curd is in very small soft flakes, so small that it is difficult to remove the whey. But when boiled milk is acidulated, the curd is much firmer than that produced in acidulated specimens having gruels added. The addition of one-third of lime-water causes the curd to be in small soft flakes, not so soft, however, as those produced in boiled milk. And it is worthy of note that a very hard curd is produced in milk with one-third of lime-water, if it be rendered faintly acid. The curd of mother's milk is very soft and in small flakes. The amount of essence of rennet added to the specimens of cow's milk caused them to have an acid relation to litmus paper, but a larger proportion had to be added to mother's milk before the acid reaction was obtained. These specimens confirm the results obtained in practice, viz., the measures of advantage gained by dilution of the milk, the great benefit of boiling it, the marked improvement in quality of the curd if it be kept open by mechanical means, as by the addition of gruels or of lime-water. But they show that this benefit is lost in the case of lime-water mixtures if much acid is present, and that under such conditions a softer curd is obtained by mixture with gruels than by boiling only, or by addition of lime-water only.

On Some New Medicaments. The British Medical Journal writes: "At the recent meeting of the Society of the Medical Staff of the Royal Charité Hospital, Professor Senator gave a summary of newly discovered medicaments, reported in the Berliner Klinische Wochenshrift. He drew a comparison between the innumerable medicines as such and their value as medicaments, and pointed out that, although the advance made with regard to specific medicines for directly curing diseases was small, yet great progress has been made with regard to those which act symptomatically. This, he said, was of great value, for by their means the pains of many incurable diseases can now be diminished, and troublesome and threatening symptoms in curable diseases can be prevented or removed. Dr. Senator then gave a brief account of his own experiences of some exotic medicaments, that have as yet received little attention in Germany. Of purgatives, he mentioned tincture of cascara sagrada, euonymin, and trisin. The tincture of cascara sagrada he considers a non-irritant and very certain remedy. One great advantage it possesses is, that it can be taken for a long time without disadvantage. Dr. Senator prefers it to senna, because it is effective in smaller doses. With regard to euonymin, Dr. Senator refers to Rutherford's valuable experiments on its physiological effects, and mentions that it is used both as an aperient and as a cholagogue; but as a cholagogue he says it is difficult to form an opinion. At any rate, it is a certain and very drastic remedy, and for this reason cannot be taken continuously for a long period. From his own experience, Dr. Senator said he had nothing to communicate about trisin, but he considered there was not much reason for introducing it. He then mentioned two narcotics, extract of piseidia erythrina and hydrochlorate of cocaine The extract of piseidia erythrina, recommended since 1845 in America as soporific, he has found very useful for neuralgic pains in the head, given in an evening in doses of about four and a half to eight grains. Hydrochlorate of cocaine he had applied with success to the mucous membrane of the urethra and the rectum, especially in connection with diseases of the bladder. As a remedy against the immoderate perspiration of phthisical patients, Senator mentioned picrotoxin, which he tried on the recommendation of Dr. W. Murrell. He had tried it in forty cases, in two-thirds of them with success. On the whole it was found to be almost as certain, as a remedy, as atropin or agaricin. Agaricin was used in the Giessen clinic as a substitute for atropin in 1883, and found to be preferable to the latter in this respect, that it could be used for a longer time."

The Necessity of an Organized Inspection of our Meat and Milk Supply by Educated Veterinarians.—The Journal of

Comparative Medicine and Surgery writes editorially:

"Although we have, in almost every issue of this journal, referred to these important questions, and, in our last, published a sketch of the methods in vogue at the best conducted abattoir in the world, we do not seem to have been successful in planting any fruitful seed. One of the most surprising phenomena in this connection is, that none of the medical journals in this country have either noticed these articles or given that attention to the subject which they should do as guardians of the public health.

It has thus far been impossible, both by personal advocacy and reiterated appeals in writing, to make any impression upon Boards of Health.

Neither the State or city representatives of the people seem able to realize a fact that has long been patent to the intelligence of the same class of men in Europe, i. e., that none but qualified veterinarians can be trusted to do this duty properly.

Such authorities assume that any politician is much better suited to guard the public health in these important matter, than men whose professional studies especially adapt them for these responsibilities. They do not seem to be aware that the educated veterinarian knows that the advancement of his profession depends upon his being strictly honest in such duties.

Our attention has been again called to these questions, by reading the following remarks in a number of Chicago daily papers:

The article says: "The health inspectors are apparently in ignorance of the fact that diseased sheep are almost daily sold at the stockyards. Sales are made openly, despite the presence of the inspectors, and no bar has far been interposed to stop the repulsive traffic. The animals are shocking spectacles, and the idea that such stuff is sold daily as food for thousands is horrifying. A thousand diseased sheep are bought at the stock yards daily by mercenary 'scalpers,' and sold to the unsuspecting public as good mutton. A syndicate is interested in the traffic."

Now, who consumes such meat? The poor and needy, who, if they cannot have luxuries, should have what they use as food guaranteed to them to be of the healthiest quality.

As a supplement to the above we may say, that we know of butchers who sell entirely among this class of our citizens, that make it a practice to buy nothing else but diseased animals, the flesh of which they peddle about from their carts, in the face of the authorities. Such animals never find their way to the inspectors, but are slaughtered in sheds, barns or out-of-the way places on the confines of our city.

Hence the need of a public abattoir in every city. Hence the need of the most strimgent laws forbidding slaughtering anywhere else.

We pretend to have an inspection of the milk supply of our cities; yet, in spite of it, the veterinarians of any of them could easily show the Board of Health where hundreds of illy-fed, poorly-housed cattle are packed together in hovels, with filth above their ankles, breathing a stench almost impossible to endure, and almost every cow the subject of tuberculosis.

We recently went the rounds, with the meat inspector, of a neighboring city, and came across a poor, emaciated cow—"a new milch cow"—with a calf by her side; the cow was pretty well gone with tuberculosis, and what made her especially interesting was, she also had manifest tuberculosis of the udder.

We asked the inspector "what he was going to do under the circumstances?" His answer was: "I can do nothing; the law does not recognize these cases." The cow was sold; went into a poor neighborhood, and her milk was peddled out to deal the seeds of that fellest of all destroyers among the children in the vicinity, consumption.

The Government of the United States says, "American hogs are almost free from trichina," yet one can read nearly every week of persons dying from the effects of this parasite.

Mr. Redding, whose report to the Indiana

Board of Health we have reviewed in this issue, says: "The highest percentage of infested hogs were those of the retail butchers."

We have examined more American pork than all the other examiners together, and found four per cent trichinous."

Diagnosis Between Indurated Chancre and Herpes.—We read in the Practitioner: "It sometimes happens that herpes of the penis presents itself under the form of a single patch of superficial ulceration, accompanied by some induration of the underlying tissues; there may also be a swelling of the inguinal glands, so that the diagnosis between this so-called chancriform herpes and some forms of indurated chancre is very difficult in the early stages. M. LeLoir, however, calls attention (Journ. de Connaiss, Méd, April 2, 1885) to the fact that when a herpetic ulcer is pressed between the fingers, a drop of serous fluid is squeezed out. This manipulation can be repeated several times with the same effect; in the case of chancre, on the contrary, a little fluid is seen on the surface, but the quantity is not increased by pressure. When the base of the herpetic ulcer is indurated, the hardened tissues can be flattened between the fingers, while in chancre, no amount of pressure can change the shape of the nodule. This difference is explained by the fact that in herpes there is a localized edema of the tissues, while in chancre the chief lesion is a hard infiltration, sometimes accompanied by sclerosis of the connective tissue and of the vessels."

CONTRIBUTION.

THE PROGRESS OF MEDICINE.

BY ARCH. DIXON, M. D., OF HENDERSON, KY.

Read before the Mississippi Valley Medical Society, September 9, 1885.

A review of the history of medicine during the past year will bring to our attention much of interest. Solid advances have been made in methods of treatment, remedies of value have been added, and the usefulness of older ones confirmed.

Had nothing more been done, the discovery and introduction of cocaine, a boon of scarcely less value to suffering humanity than chloroform itself, should mark it as one ever to be remembered by our profession. Of cocaine in its manifold applications for the relief of pain in surgical operations, especially in connection with the eye, it merely suffices to speak. Of its physiological action and various uses, others will perhaps go into detail. While other lands have been devastated by extensive epidemics, carrying grief and mourning to the hearts and homes of their people, I can congratulate the profession and our country that its physical health has been exceptionally good. It is true that typhoid-fever appeared in Plymouth, and carried off many of its inhabitants; but this was an epidemic local in character, and one which should have been prevented by proper sanitary procedure. Thus far our fair land has escaped the blighting influence of that dread scourge, yellow-fever, which, a few years since, carried death and destruction to hundreds, and grief and mourning to countless thousands of our people. Thus far, too, we have been spared the visitation of that direful plague, cholera, which is now spreading its vampire-wings over the sunny lands of Spain and France, and numbering its victims by hecatombs. And to-day, gentlemen, the problem which, above all others, should agitate the minds of the medical profession, and be regarded as the most pressing question of the day is: Is cholera a preventable disease, and if so can it be averted from our shores? There is an old saying that "history repeats itself," and this is eminently true of the history of cholera. Beginning in India, where it is endemic (especially is this true of the province of Bengal), where, every third, sixth, ninth, and twelfth year, the great pilgrimages to Juggernaut, Hurdwar and affiliated shrines assemble, it spreads slowly westward, following the routes of returning pilgrims, and in the track of traffic and travel, both by land and sea, until it reaches Europe, where it prevails for a year or two before being brought to this country. The influence of these pilgrimages upon the dissemination of cholera can be traced from 1781 down to the present epidemic in Spain and France, and, unless measures are taken to prevent it, we shall have a repetition of those fearful visitations which, beginning at Quebec in 1832, spread thence to the gulf, carrying horror and desolation in its track. No pen can depict the terrible scenes produced by it in New Orleans. In

the short space of three weeks it claimed for its victims over six thousand people, being fully one-twelfth of the population of the city at that time. The epidemic of 1832 was the first appearance of cholera in this country, the last being the epidemic of 1873, the infection of which extended over the states of Louisiana, Texas, Mississippi, Alabama, Georgia, Arkansas, Tennessee, Kentucky, West Virginia, Pennsylvania, Ohio, Indiana, Illinois, Missouri, Iowa, Minnesota, Dakotah, and Utah. There can be no doubt that each and every visitation has been the result of importation. Now the point to be determined is: Is the germ origin of the disease the true one? Is the germ always present in cholera? Is it ever found anywhere else? Koch maintains that there is a definite organism associated with cholera, and this opinion is supported by many of the best men in our profession, both in this country and in Europe.

The specificity of Koch's bacillus does not rest alone upon its shape, being that of a comma, but on the peculiarity of its mode of growth, in the way in which it grows at different temperatures, and on different substances. It has been contended that the bacilli of Emmerich, of Finkler and Pryor, Denneke's and Müller's, have all the comma shape, that the method of their growth, propagation and cultivation are the same. But is this true, and are they identical with Koch's bacillus? Should an organism be diagnosed solely on its morphological character? The comma-shaped bacillus can be found in glanders, dysentery and other diseases in large numbers, but it would take a reckless man to say that these were identical with Koch's bacilli. None of these bacilli exactly agree with the bacilli of Koch in their mode of growth on potatoes, etc. The bacillus found in the salivary secretions appears to be very like that of Koch, but neither Koch nor his pupils, or Mr. Watson Cheyne, or Klein, or any other observer has been able to cultivate the comma bacillus from the saliva. In regard to the second question, most observers agree that the bacillus was always present in cases of Asiatic cholera, though there are discrepancies of statements as to the numbers and site of the organisms. As to the estimation of numbers, the process by cultivation has been found to be the only satisfactory one. In the evacuations of an exceedingly acute case, from which Mr. Watson Cheyne made cultivations, within a quarter of an hour of their passage from the patient, he found that ninety-five per cent of the organisms were comma bacilli; whereas in the dejecta themselves the comma bacilli were very few in number, but small, straight bacilli were very numerous. The more acute the case the fewer comma bacilli would be found.

Mr. Cheyne thinks that the existence of a straight stage of the comma bacillus would explain a good deal of the controversy on the score of numbers. In answer to the third question it may be stated as above that the comma bacilli are found in dysentery, in the saliva in cholera morbus, and Muller has found a comma bacillus in a carious tooth, but none of these could be cultivated in the same media as those in which Koch's bacillus could be cultivated. Experiments on animals, whilst they have not been as conclusive as might have been wished, have proved that the bacillus of Koch is the only one from which any positive result has been obtained. Mr. Watson Cheyne, in two cases out of fifteen or sixteen experiments succeeded in producing all the symptoms of cholera, including diarrhea, cramps and collapse; at the autopsy the intestines were hyperemic. Peyer's patches were swollen, and in one of them a hemorrhage was seen; comma bacilli were found in abundance in the contents of the intestines. Koch has obtained the same result in a very much larger per cent of cases, and all of his experiments were conducted with complete antiseptic precautions. It follows from all this that the poison of cholera must be a micro-organism, for nothing but a living thing can reproduce itself, and I consider that Koch's position so far has remained unassailable. If, then, the germ theory of cholera be true, and it be admitted that it is a contagious and portable disease, then as a matter of course it must be added that it is a preventable disease, and the point at once arises how best to destroy these germs. The answer is, by disinfection, and the proper use of germicides, and a sufficient quarantine to guarantee detention until this process is complete. So far no quarantine has been effective simply from the fact that detention alone was practiced without regard to disinfection, but with the light thrown upon the germ origin of contagious diseases during the past few years and the efficacy of germicides, quarantines should become what they were intended to be, a protection and not a delusion and a snare. And I know of no better plan having been proposed than that of Dr. Joseph Holt, President of the State Board of Health of Louisiana, which is as follows: (Review of Quarantine and Maritime Sanitation, Joseph Holt, M. D., New Orleans, 1885.) "When a vessel arrives from a port against which quarantine precautions are required she is brought

alongside the wharf, where she finds every arrangement for the rapid discharging and reloading of cargo, if required. All on board, officers, crew and passengers, with their effects, are at once taken ashore, where, in a room provided, everything they carry, apparel and baggage, is subjected to powerful disinfection. All clothing and articles that will admit of it will be laundried, and in this process subjected to boiling water and the hot iron. The clothing worn is presently exchanged for other already treated, and this in turn disinfected. The passengers and crew will be received in commodious quarters, comfortably prepared for them, there to undergo the prescribed detention, or observation, determined according to circumstances, of the possibility of their being infected with the disease in its incubatory stage. If one should fall ill, he is at once removed to a properly isolated hospital, distantly located. The period of observation concluded, without evidences of infection, these people will be returned aboard their ship, which during their absence has been cleansed and disinfected in every part. A strict surveillance will be continued over all shipping in port. The first division of the new system provides for the supplemental station for infected vessels only. The second, for the management of persons arriving at the upper or regular station. These having been described, there remains to be considered the third for the sanitary treatment of cargo and ship. A detailed account of this process is unnecessary here. It is sufficient to mention that its speedy and effective accomplishment is assured in the employment of a full corps of acclimated stevedores, a powerful tug boat provided with flushing hose, a steam siphon, a battery of twelve furnaces for the energetic evolvement of germicidal gases (we will use sulphurous acid gas) driven into the ship's hold by a powerful fan, at the rate of six thousand cubic feet per minute. In this manner, after thorough washing, the gas in immense volnmes and with tremendous force is driven into the limbers and air strakes, into every crevice and part of the ship, until she is completely filled. In doing this we misplace the mephitic and dangerous atmosphere inclosed in her when she started from Rio, we will suppose, and which, if allowed, would have been set free at our levee, the infected atmosphere of Rio to commingle with the atmosphere of New Orleans, deadly ripe, perhaps, for its reception. We have displaced this, not only with a non-infectant atmosphere, but with one intensely germicidal. One that destroys organic elements in the air, on exposed surfaces with instant greediness. The decks, ballast, and all such parts as are usually treated with carbolic acid or other disinfectant fluids, objectionable on account of odor, staining, or inefficiency, will be subjected to the action of an odorless, colorless solution of the bichloride of mercury, the most powerful and unsparing germicidal agent known." In how many places will these precautions be strictly carried out? Perhaps in New Orleans, whose people have been so often scourged by imported diseases that they have become wise through suffering—probably not elsewhere. In fact in but few of the ports of entry in the United States, do the quarantine stations more than deserve the name, for they are so poorly provided as to be utterly inadequate to the carrying out of such provisions as are laid down in Dr. Holt's plan. Dr. Rauch, Secretary of the State Board of Health of Illinois, in speaking of the aversion of cholera, "North American Review" August, 1885, says: "No vessel from a port infected with cholera or carrying persons or things from an infected region, should be allowed to part from this country without being first made secure against the possibility of conveying the disease.

If this could be accomplished it would of itself render unnecessary all other means of combatting cholera so far as we are concerned; but although repeated attempts have been made to this end, the exigencies of commerce, aside from all other considerations, have thus far sufficed to defeat them." Dr. Rauch adds these considerations in view of the fact that the disease has always been introduced by emigrants, and that it is not practicable to learn in advance what emigrants are dangerous in this respect. That during the existence of Asiatic cholera on the European continent, at least, the safety of this country can only be assured by enforcing a thorough system of sanitary supervision over all immigrant travel, from the time of the arrival of the vessel in the roadstead, to the settlement of the immigrant at his point of ultimate destination. Such supervision should deal not only with the person of the immigrant, but should embrace the thorough disinfection and purification of every article which he may bring with him. For this purpose the vessel should be detained long enough to establish a perfect sanitary condition of her entire personal contents and belongings. Dr. Rauch might have added with Dr. Vanderpool in regard to vessels bringing emigrants to this country, that, with competent medical officers, isolated hospitals, absolute cleanliness of attendants and prompt disinfections of discharges, the disease should be limited to

those who had contracted it before coming on board, and be virtually suppressed by the time of their arrival at any of our seaports. These conclusions are based upon a careful study of the whole subject, by our best and most practical sanitarians, and if carefully heeded will demonstrate that cholera can be kept out of our country. Should, however, a walking case, with premonitory diarrhea or personal effects infected with the germs, be allowed to slip through quarantine, then other measures looking towards the prevention of its spread must be taken, and, in the time allotted me by the Society, it will be impossible to go into detail. But, in a recent number of the Medical Record are to be found the conclusions arrived at by the Italian Royal Society of Hygiene, as to the best means of preventing the spread of cholera. The record says: "As these conclusions are based on the wide experience obtained from the prevalence of the dread scourge in Italy last year, they deserve attention."

THE SOCIETY ANNOUNCES:

The fundamental basis of public prophylaxis against cholera is well-ordered independent sanitary administration, composed of medical persons especially instructed on the subject, supported by the Government. To this end recommended:

1. A reorganization of the existing service in the best possible manner.

2. That schools and laboratories be established to educate physicians in hygiene, that they be able to fill these high and responsible offices properly.

Relative to the etiology of cholera, Prof. G. Sormani gave the Society the following facts, deduced from observation made during the epidemic of 1884.

1. That infected garments are the means in many instances of propagating cholera-germs, and that they are more to be feared than people themselves.

2. That the clothing of the feet should be the object of special attention, as these, coming in constant contact with the surface of the soil, are more easily contaminated in infected places, and, maintaining constantly a certain degree of moisture, can preserve, transport and diffuse with great facility the cholera-germs.

3. Linen washed in infected water transmits the cholera.

4. That probably in linen and garments infected with cholera, and in contaminated water, the cholera-germ acquires a special character (sporification) where it has greater tenacity and duration.

5. That animals and birds, especially those which are filthy, seem to be able to carry the cholera-germs in their fins and feathers.

6. That surface water and surface soil have been proved to be a means of transmission of the cholera-germs.

7. That running water transports from the surface of the soil the germs, which multiply and diffuse themselves.

Therefore, he concludes that the local authorities should be empowered to take measures to prevent the contamination of the water courses, for when this happens it will not be possible to check the spread of the disease; and that to provide efficacious safeguards against cholera the Government should favor with money and encouragement the study undertaken in Italy for a more exact knowledge of the facts which go to establish a basis of scientific prophylaxis. The Society considered the means of preventing the invasion of cholera. These should consist of:

1. Strict quarantine on the frontiers adjacent to the infected countries.

2. Sanitary inspection of the quarantined. Disinfection of garments with moist heat at 100° C. Destruction of same if polluted with infection.

3. That while free passage of new merchandise destined for commerce be permitted, all free passage of every kind of effects, garments and objects used should be forbidden.

4. Wherever return of travellers is possible it should be done. Emigrants (operatives, peasants and poor people) coming from infected distrtcts should be returned under the care of the Government, and preferably by water rather than by land.

The society recommend that the quarantine laws relative to quarantine of harbors and pest-houses be revised to correspond more with the altered conditions of travel. That the land and sea quarantine be proportioned to each other.

Relative to internal quarantine it is suggested that a sanitary cordon under the direction of the Minister of the Interior be instituted; that the circulation of the people from infected districts be prevented, and that those who come should be quarantined and disinfected. The fumigation of people and of effects ordinarily performed, at the railway stations or elsewhere, ought to be prohibited as useless and also dangerous.

For prophylaxis the society advise:

1. To combat as far as possible the first case of cholera or suspected case; that such be taken to a suitable hospital; that suitable

fumigation follow, and every precaution be used that the infection do not spread.

2. To institute common ovens for practising effectual disinfection. To take great care to separate infected clothing from that going to the general laundry, and to banish useless fumigation of people and things.

3. To hinder everything tending to increase the misery and panic of the people; to favor the establishment of a public kitchen and inspection of all alimentary substances and of drinking water.

4. Recommending, above all, the care of the hygiene of the house, of the soil, and of the sub-soil of inhabited places.

Lastly, the society maintains that in the quarantine of persons from infected districts ten days afford ample opportunity for disinfection.

CLINICAL LECTURE.

ON PHTHISIS PULMONALIS.

Delivered at the Post-Graduate School during the Summer Session of 1885.

BY JAMES K. CROOK, M. D.,

Instructor in Clinical Medicine at the New York Post-Graduate Medical School (Intermediate Term); Assistant Physician to the Out-Door Department of Bellevue Hospital.

LECTURE I.—A "BORDER-LINE" CASE.

This patient, gentlemen, is Daniel F., aged 34. His regular business is sail-making, but for the past few months he has been engaged in "odd jobs" wherever he could obtain employment. We will endeavor to elicit his history. He informs us that he dates this trouble from the middle of February of the present year. At that time he was working one day in the furnace-room of a large sugar-refinery in a neighboring city in a very close, overheated atmosphere below the level of the ground. He was covered with a profuse perspiration when he came out into the open air and walked to his room at some distance without an overcoat; as a consequence he contracted a severe cold. For several days he had a heavy cough, hoarseness, great soreness across his chest, and all the evidences of acute bronchitis. These symptoms subsided within a few days. The cough, however, though much modified in severity, did not disappear entirely, but persists to the present time (more than five months later). For three or four months past it has been very slight, hacking, and attended by very little expectoration. He has lost considerable flesh, has occasional nightsweats and, as we see, his skin presents a very pallid aspect. He states that he has occasional rigors at irregular intervals, though at present his temperature is normal and his pulse is 88 per minute. His appetite is not very good, his bowels are irregular and his tongue is slightly coated. There is no pain whatever about his chest, though at times there is an uneasy sensation on the left side. There is no family history of consumption. The patient himself has never had any lung trouble prior to the present attack.

So much for the subjective history, which is very suspicious but by no means conclusive. These symptoms might all be caused by chronic bronchitis or chronic pleuritis, or perhaps by the two conjoined. It is only by a physical examination that we may be enabled to exclude these affections or to confirm our suspicions of phthisis. On directing the patient to remove his upper clothing it becomes at once apparent that he is in a rather depressed physical condition. The skin is sallow and the ribs are too prominently visible; the clavicles project too freely, there being considerable flattening both above and below these bones, though not appreciably more on one side than the other. There is considerable though not marked emaciation. When he takes a deep inspiration we notice that the respiratory movements are tolerably free and there is no perceptible loss of symmetry in this respect unless possibly a slight limitation on the left side. I am unable to detect anything abnormal with regard to the vocal fremitus. Owing to the greater diameter and lesser length of the right bronchus we often find the vocal fremitus and resonance more pronounced on the right side. In this case I can find no difference on the two sides, and that is the case more often in perfect health than otherwise. On percussing the chest in various parts I do not find any distinguishable deviation from the normal standard. The note seems to be quite clear and resonant. By percussion alone then we are enabled to exclude the existence of chronic pleuritis unless it be accompanied by very slight exudation and circumscribed to very narrow limits. We now come to auscultation, perhaps the most important step in a physical examination of the lungs. When I first listen to the breathing in different parts of the chest I am inclined to decide that it is about normal; possibly a little obscure in some parts and a little exaggerated in others, but on the whole a pretty fair example of normal vesicular breathing. By using extra care and attention, however, I find a small area behind the

left clavicle and extending down to about the second rib, in which the respiration differs from that heard at the right apex and in other localities. The inspiratory murmur is wavy and interrupted, while the expiratory sound is much longer than it should be and higher in pitch; it extends to the very commencement of inspiration, there being no distinguishable interval between, as in health. Further than this, the respiration appears to be about normal all over both sides. I am unable to detect a single râle in any part of the chest.

We now have before us about all the data with reference to this case which it is possible for us to obtain. The patient is evidently suffering from serious constitutional trouble which has its seat in the lungs or bronchi. What is our diagnosis?

The long continued cough, the night sweat, and the loss of flesh point strongly to a diagnosis of pulmonary consumption, but, as above stated, they are not unequivocal. Concerning the physical signs in such cases an old writer, (Swett, Lectures on Disease of Chest), has said: "If you find under one of the clavicles a degree of dullness, however slight, accompanied by a feeble murmur or by a prolonged expiration; or, if the murmur of inspiration is harsh or jerking, or attended by a slight dry crackle, then the diagnosis of the case, even at this early period may be considered as established—tubercles exist in the lungs." We are minus the dullness and the crackle in this case, but the other physical signs are in themslves highly significant. The interrupted inspiratory murmur and the prolonged high-pitched expiration at the left apex are strongly indicative of localized bronchial catarrh, and this condition is invariably present in the first stage of phthisis. When it exists the lumina of the bronchi are encroached upon, either by swelling of their mucous lining or by inflammatory exudation upon their walls, the tubes at the same time losing much of their elasticity. This encroachment prevents the free ingress and egress of air through the tubes to and from the air-cells and smaller bronchi, thus giving rise to the peculiar changes in the respiratory sounds, the inspiration being interrupted or wavy, and the expiration prolonged and high-pitched. Now, the expiration in uncomplicated emphysema is also prolonged, but it is almost invariably low pitched and is apt to be widely diffused. Prolonged high pitched respiration is occasionally accidental. I have noticed it in a few instances in persons who made no complaint of their lungs. It undoubtedly is sometimes heard in cases of simple bronchitis. It may possibly be accidental in this case, but conjoined with the patient's history its importance becomes patent. If we consider the term phthisis merely in its etymological signification, we may safely apply it here, for our patient has undoubtedly been in a state of decline or waste for a number of months; but if we are to use it in the sense commonly employed by the profession to express a specific disease of the lungs, we must hesitate. The most that we can say is that it is extremely suspicious; it may well be termed a "border-line" case, or, to use a lay expression, the patient is "threatened with consumption." The microscope may soon become a valuable aid in the diagnosis of early phthisis by demonstrating the presence in the sputa of the bacilli, which, it is claimed, exist in all cases of tuberculous deposit. At present, however, the significance of these germs is too much a matter of dispute, and the processes for their isolation and demonstration attended with too much difficulty to be of much avail from a diagnostic point of view.

It is hardly necessary for us to predicate the anatomical changes which may have been wrought in this man's lungs. It may be that there is simply a chronic congestion of the bronchial tubes, with a deposit of mucus upon their lining membranes, and perhaps some thickening of the tubes, which would indicate chronic bronchitis; or the process may have extended a little further and reached a stage in which some of the pulmonary alveoli have collapsed and epithelial desquamation have begun in their cavities and inflammatory infiltration in their walls, which would indicate the early stage of phthisis. Tubercles also may be forming in the lungs.

It is easy for us to see that this man stands in imminent danger. If he continues in his present surroundings and mode of life we may expect within a few weeks to find unmistakable evidences of phthisis in his lungs, for it is in this way that many cases of catarrhal phthisis are developed. The indications for treatment are plain. The main object is to strengthen and invigorate the general system; this can be done better by hygiene and dietetic rules than by medicines. There are three cardinal measures to be observed, viz.: out-door exercise, sleeping in a well ventilated room, and a nutritious regimen.

This man should seek light employment out of doors for a few weeks. If he can procure them, milk, eggs and farinaceous articles of food should enter largely into his daily dietary. If these steps are neglected or im-

properly observed, we may be sure that all the medicine we may apply will not effect a cure. A moderate quantity of alcoholic stimulants may be conjoined if well tolerated. Ale, porter or Dublin stout may be recommended in cases in which the patient can afford it.

In the employment of alcoholic stimulants in such cases it should be impressed upon the patient that they are to be taken purely for their medicinal effects. When presented in this way and with this precaution they rarely lead to habits of intemperance. A frequent bath of cold water followed by vigorous friction with a coarse towel or flesh brush is often of much benefit to such cases. The cold water is an excellent tonic, and its frequent application, with proper precaution, invigorates the cutaneous surface and seems to give a certain immunity from renewed attacks of bronchitis. In regard to medicines, we have a vast number from which to choose. The last edition of the National Dispensatory mentions more than 100 remedies which have been recommended for bronchitis alone. We should in a case like this choose tonic medicines or those which promote constructive metamorphosis. I am acquainted with no more valuable preparation to this end than the old-fashioned combination of phosphates of iron, quinine and strychnia. It may be given in the form of an elixir, a teaspoonful of which (to be taken three times a day at meal-times) represents 1-120 to 1-60 of a grain of phosphate of strychnia, two grains phosphate of iron and one grain phosphate of quinia, or a pill containing same quantities. The cough calls for treatment. As it seems to be in this case chiefly reflex or irritative and accompanied by slight expectoration, we would employ simple palliative or sedative cough remedies. A good combination would be

℞ Potassii Bromidi, ʒj.
Syrup Ipecac.
Syrup Prun. Virginian, aa ℥iss.
M. One to two teaspoonfuls as required.

The syrup of wild cherry has considerable domestic reputation in the treatment of phthisis. It is a useful adjunct to cough mixtures as it undoubtedly promotes digestion and aids constructive changes. To overcome the costive habit I would advise the patient to take every night at bedtime a pill, Rhei comp. of the Pharmacopœa, until there is a regular morning evacuation. They may then be discontinued, to be resumed as occasion may require. These measures would seem to meet the present indications in this case, but the patient should be kept under close observation and a careful examination of the chest made occasionally.

CORRESPONDENCE.

LONDON LETTER.

LONDON, September 26, 1885.

Editor Review: The first of October is drawing very near with its terribly dull opening addresses, which, though of course there are exceptions, bore the hearers and the givers alike. Several of the schools have had the good sense to drop them, as they only gave the opportunity for a most undesirable amount of rowdyism, and a conversazione or a dinner of old students replaces the opening address at Guy's, the London and St. Bartholomew's; at Charing Cross, I believe, the session opens, as a rule, without any flourish of any kind.

It is much to be desired that some amalgamation could be effected between our eleven separate completely equipped schools, but the difficulty is how it is to be brought about. If they could be rolled into four or at most five, nobody would suffer except the second-rate men, who are enabled under the present regime to set up as consultants and teachers because there are of necessity so many hospital appointments, and lecturerships to be filled. I do not hesitate to say that it would be a decided boon to the students, the clinical material would be the same, but as the teachers would be fewer they would be men of greater experience, and would therefore be able to make a better use of it; botany, materia medica, forensic medicine and such subjects would be taught by men who had some knowledge of their subject and who would be adequately remunerated for their work, and not as is too often the case now, by men who have taken the lecturership simply because nobody else on the staff wanted it or because they were next in seniority for a lecturership when it fell vacant.

Of course I am not saying that there are no good lecturers at present amongst our small schools; fortunately that is not the case, but there is no school whose teaching staff would not be greatly improved by fusion with some other school and a careful weeding out of the weakest vessels. I feel, however, that all this is but idle talk, except for one thing. As your readers are doubtless aware, our hospitals are all supported by voluntary subscriptions, with the exception of Bartholomew's, Guy's, and St. Thomas's; of late years they have one and all suffered for want of funds, the subscriptions have fallen off to an alarming extent, and there has been no corresponding reduction in the expenditure possible without a step that all the hospitals have shown

themselves most reluctant to adopt. This year the depression of trade has been more severe than even any of its immediate predecessors, and this means a further diminution in the amount devoted to charity. With some of the hospitals it will certainly before long come to this, that either they must close their doors or they must receive assistance in some shape or another from the state. There are not a few reasons why such a result is undesirable, but from the point of view of clinical instruction, the sooner it comes to pass the better. When all our hospitals are under the control of the state, there will be an end to the separate schools. London will become one vast clinical center, and, moreover, this would be a most admirable thing, our workhouse infirmaries would become available for clinical purposes. At present the poor law guardians are very chary of allowing much to go on in the nature of original work or teaching in the infirmaries, but we have only to think of Charcot and his work at the Salpetriere to feel what might be done here if the opportunity was only granted. On the very few occasions when I have had the chance of going into the wards of any of the infirmaries I have been struck with the great number and variety of interesting chronic diseases I have seen there. The best work that I know of that has been done in an infirmary in this country is Alexander's operation for the cure of prolapse of the uterus, by shortening the round ligaments.

Our societies will soon be in full swing now and several of them have already issued their cards of meetings; the Lancet and the Medical Times have each a notice referring to the date of the opening meeting of eight of them, and, curiously enough, they differ as to four, though as to which is in the right I cannot pretend to say. Then there is the Harveian Oration at the College of Physicians, which has hitherto always been delivered in June, but which henceforth is to be given on October 18, though whether that day has been chosen because it is the day in the church calendar sacred to St. Luke or whether it is because on that day two years ago Harvey's remains were transferred to the sarcophagus erected by the College in the church at Hemel Hempstead, I cannot pretend to say. Dr. Quain is the orator this year, and I understand he does not intend to follow the beaten track and merely dilate on Harvey's personal character or on his indisputable claim to have discovered the circulation of the blood. Dr. Quain is a little man who hails from Ireland and is sure to say something amusing; he is apt to be thought fussy at times, but he is one of the most useful members both of the College of Physicians and of the General Medical Council, where his great business capacities are fully recognized.

I observe with much regret that there does not seem any disposition on the part of those who are organizing the Washington Congress to be guided by public opinion, which has been expressed so unmistakably. This is producing its natural effect over here, for in more than one quarter I have heard rumors of steps being taken to arrange for a congress in Europe in 1887, a crisis which I believe may even yet be prevented.

Yours, etc., R. M.

ITEMS.

—Ringer's English Bin-Oxide is an excellent remedy employed for the promotion of menstrual secretions. Price, $1.00. Clarke & Co., Importers, 819 Arch street, Philadelphia, Pa.

—Prof. R. L. Rea, of the College of Physicians and Surgeons, Chicago, Ills., has retired from active duty as a teacher after a quarter of a century of lecturing.

He was demonstrator of anatomy for two years in his alma mater, the Ohio Medical College. He was professor of anatomy for sixteen years in Rush Medical College, and taught the same branch for four years in the Chicago Medical College. He has been for the past three years Professor of the Principles and Practice of Surgery and Clinical Surgery in the College of Physicians and Surgeons of Chicago.

—A correspondent thus writes: "Regarding the native treatment of disease in India, one of the most curious things I ever witnessed was a half-clad native shouting through the streets of a country town: 'Does any one want back his sight?—one rupee only!' as if he were hawking fruits or sweatmeats, and to my astonishment, a patient soon presented himself to be operated upon for cataract. There and then, standing in the bazaar, the itinerant oculist took out his penknife and performed the operation in a few minutes, bound up the man's eyes, telling him to keep in the dark for a fortnight, received his fee of one rupee, and shouted his war-cry for more patients. The operation was almost unvaryingly successful; one instance among my servants being a woman of eighty, who had charge of my fowl-house, and had for many days been sightless, except to distinguish light from darkness, and who in this way was successfully operated upon."—Chambers' Journal.

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AMERICAN AND GERMAN METHODS OF VACCINNATING.

We are pleased to note that the Medical Record takes the German ground in this matter, i. e. in recommending the advisability of making more than one insertion of virus in vaccinnating. Statistical research abundantly proves that protection is increased with the number of vaccine cicatrices. The records of the Small Pox Hospital of St. Louis were kept with a view to ascertaining this point for quite a period, and the figures show the great immunity conferred by many scars.

Most valuable statistical evidence of the different degrees in which persons vaccinnated in different ways will be safe against death by smallpox, if they should happen afterwards to contract this disease is given in a table founded on information given to the Medical Officer of the Privy Council, England, by Mr. Marson, Surgeon of the Hospital, as the result of his observations made during twenty-five years in nearly 6,000 cases of post-vaccinnal smallpox.

Cases of Small-pox, classified according to the Vaccination marks borne by each Patient respectively.	Number of deaths per cent in each class respectively.
1. Stated to have been vaccinated, but having no cicatrix	21¾
2. Having one vaccine cicatrix*	7½
3. Having two vaccine cicatrices†	4⅛
4. Having three vaccine cicatrices	1¾
2. Having four or more vaccine cicatr.	¾
Unvaccinated	35½

* Among cases in which the one cicatrix was well marked, the death rate was 4¼. Among cases in which it was badly marked, the death rate was 12.

† Among cases in which the two cicatrices were well marked, the death rate was 2¾. Among cases in which they were badly marked, it was 7¼.

The Record writes:

"The question whether one or several pustules should be made in vaccinating is one that is hardly raised at all in this country. Even in the elaborate and careful article upon the 'Technics of Vaccination', by Dr. Foster, in 'Pepper's System of Medicine,' no reference is made to the matter. Yet it is well known that the profession in Germany have very settled convictions that several pustules should be made. The German Commission which met a year ago at Berlin to discuss and formulate conclusions upon the subject of vaccination, took up, among other things, this point. 'In what relation,' it was asked, 'does the number of vaccania pustules stand to the protective influence of the vaccination?'

According to Dr. R. Koch, out of 703 small-pox patients in the Stockwell Hospital there died, of those having no scars, 47 per cent; of those having poor scars, 25 per cent; having one good scar, 5.3 per cent; having two good scars, 4.1 per cent; having three good scars, 2.3 per cent; having four or more scars, 1.1 per cent. From this it would be inferred that a person having four scars on his arm is almost certain, even if he gets small-pox, to go through it safely. Koch himself takes the position, positively, that the protective power of vaccination is in direct relation to the number of vaccinia pustules.

Professor Grossheim cited cases to show that in revaccination the virus 'takes' less often on those who have several scars. Similarly, Siegel found that among children presented for revaccination the successes were the rule if the child had but one scar, and the exception if it had four to eight.

Arnsperger had observed during a small-pox epidemic that the protective influence of the vaccination increased with the number of the scars.

On the other hand, Reissner did not ob-

serve much difference. In revaccination of patients with one scar he got 96 per cent of successes, while of those with two or more scars he got 94.7 per cent of successes.

There is evidence in English statistics that persons having a number of scars are more surely protected against variola. It is true, however, that in England more than in Germany, these scars represent several successive vaccinations.

The conclusion of the Commision referred to was that two was the minimum number of pustules to be made in a protective vaccination. Professor Eulenberg even urged that the minimum should be three.

Here are conclusions quite opposed to American practice, and they are worthy certainly of attention."

Hysteria in Males.—At a recent meeting of the balneological section of the Gesellschaft fuer Heilkunde, Berlin, Dr. Joseph, of Landeck, read a paper upon this subject, describing two cases. An apprentice in a house of business, "of good family," had an attack of acute rheumatism when eighteen years of age. Convalescence was protracted, and followed by great distension of the stomach, hiccough, and general clonic spasms of the voluntary muscles, forcing the trunk suddenly into all manners of attitudes, and causing obstruction to deglutition, etc. After treatment at a hydropathic establishment, all these symptoms disappeared, but were followed by ptosis and right motor hemiplegia, hyperesthesia on both sides of the body. The convulsions returned after the paralytic symptoms had abated. Dr. Joseph then examined the patient, who appeared to be robust, muscular, and ruddy complexioned. He stared suspiciously at bystanders, and was very excitable. He walked slowly, and with the aid of a stick, dragging the right foot. Percussion of the thorax caused opisthotonus; the six lower dorsal vertebræ were especially sensitive. The appetite had become very good, and globus was frequent. The bowels remained constipated for days or even weeks. No history of sexual abuse of any kind could be traced. After ten weeks of hydropathic treatment, he left Landeck apparently cured. It was found that the patient's grandfather, who had recently died, aged seventy-eight, had suffered for fifty years from hysterical fits, precisely similar to those observed in young women. The second case was that of a robust horse dealer, aged thirty-eight, who had a flourishing business in Prussian Poland. He had served for three years in a German cuirassier regiment, and was father of a large family. Four years before consulting Dr. Joseph, he caught cold, and aphonia followed. A little later, clavus was complained of, and then he began to have convulsive attacks, without loss of consciousness, but with loss of power of speech. These attacks were often followed by vomiting. Then, when he applied to Dr. Joseph, he became subject to globus, hoarseness without objective laryngeal symptoms, and great mental irritability. The physician witnessed a fit. The patient, a very tall, strong man, lay stretched out in bed, with clonic convulsions of all his extremities; he was quite conscious, but could not speak. There was constant hyperesthesia over the interscapular region, the lower cervical and upper dorsal vertebræ, but not in the iliac region. The patient was relieved by hydropathic treatment. There was no family history of hysteria or epilepsy.

The Cholera Conference in Berlin.—The New York Medical Record in discussing the report of the second conference upon cholera, held in Berlin in May of the present year, says:

"The discussion was almost interminable (the report of it fills seventy-seven closely printed pages, somewhat larger than a page of the Medical Record, and is issued as a supplement to the Berliner Klinische Wochenschrift for September 14 and 21, 1885), but it lacked the interest of the one of last year, as there was little of novelty developed during its progress. The first subject for discussion was the new discoveries made since the last session regarding the cholera bacteria, especially as to the forms under which they pre-

serve their vitality. Koch spoke at great length, and defended his position against the attacks which have been made on him by Klein, Finkler and Prior, and others. He endeavored to show that their methods of investigation were faulty, or that they had not been able to distinguish between his bacillus and other forms of microbes. As to the claim of priority made for Pacini, he thought it very doubtful whether this observer had really seen the true cholera bacillus, and said that he himself had never heard of the alleged discovery until long after he had published the report of his own investigations. In discussing the question of disinfection, he expressed his decided preference for carbolic acid over any of the metallic salts. The speaker said that a permanent form of the cholera bacillus had not yet been discovered, and perhaps there was none. But such a form was unnecessary, since the bacillus would live in moist earth for five months or longer when the conditions were otherwise favorable. A discussion then ensued between Koch and von Pettenkofer, the latter maintaining that the characteristics of the different cholera epidemics furnished conclusive evidence that the cause of the disease could not reside in a specific bacillus. He thought that cholera was no more contagious than was malaria. The question of experiments upon animals was also discussed, but without developing any points of especial interest.

The second and third points proposed for discussion were that of the spread of the disease through pilgrimages and by ships, and the influence of the soil, air and water upon this spread. Koch said that the facts in support of the view that the disease was spread by human intercourse were incontrovertible, and he thought that there lay a danger to Europe in the railways now being built in Central Asia, on the completion of which India and England would be separated by a journey of only eleven days. He expressed himself further as of the belief that one attack of cholera confers immunity against subsequent attacks, at least temporarily. He explained in this way the fact that cholera is spread in waves along the paths of human travel from its endemic seat toward Northwest India. Each epidemic in these parts, he said, left behind it an immunity which existed for three or four years. At the end of that time the communities were no longer protected, and another invasion of the disease occurred. Bryden had called attention to this periodic overflow of the cholera, but had wrongly attributed it to the influence of the monsoon. Koch thought that the history of an epidemic on the ship Matteo Bruzzo was a sufficient answer to von Pettenkofer's theory. In this case the disease appeared on the thirty-fourth day, and the last case declared itself on the fifty-second day after the vessel had left port. If now the contagium could exist only in the ground, the ship not having touched land since starting, it was necessary to believe that the incubation period of the disease was from thirty-four to fifty-two days in length. The speaker thought that immediate contagion was rare, but the intervention of clothing or some other suitable soil for the development of the bacillus was necessary. Virchow said that, as far as he was aware, no facts were in existence in proof of the theory that cholera germs could be carried directly to man from the soil, as could the malarial poison. He thought, however, that the opposing sides in this controversy could reach some agreement if one would admit that cholera bacilli could grow in the earth and the other that they could grow in agar-agar and in soiled clothing.

Then Koch spoke at great length against the assertion that the rise or fall in the level of the sub-soil water bore any relation to the severity of an existing cholera epidemic. Von Pettenkofer defended his views on this point at equal length, but no new arguments were brought forward on either side.

The last question brought forward for discussion was that of the measures proper to be taken against the cholera, but here, as elsewhere in the conference, nothing new was developed. Koch enumerated various measures of disinfection, cleanliness, thorough cooking of food, etc., and repeated that he considered

carbolic acid as the most practical disinfectant which we have at our disposal. Virchow remarked that if a strict quarantine were possible, as, for example, on an island, he would be in favor of it, but he regarded a land quarantine as wholly impracticable. Von Pettenkofer said that when the cholera visited Bavaria in 1836, it was universally regarded as non-contagious; and people acted upon this belief. Of course there was no disinfection, but further than that no especial efforts were made in the direction of cleanliness, and no attempt was made to isolate the sick. Yet, notwithstanding all this, Bavaria, and especially its chief city, Munich, had never been visited by so mild an epidemic as this. He thought that even if measures of thorough disinfection and isolation could not be carried out, there was no occasion for alarm or special anxiety. The question of the diet of individuals in time of an epidemic was broached, but Koch said that as yet no special rules could be laid down.

In the course of his remarks Koch took occasion several times to attack Cunningham's views, and said that these were not held by many of the other medical men in India, but that they were afraid to express their real convictions if opposed to those of Cunningham, as they would be in danger of losing their positions. Von Pettenkofer defended Cunningham's character, but Koch repeated his assertions several times. If these charges be true, their public statement may lead to a reform in the Indian Medical Service, and then the second cholera conference will have accomplished something after all.

After an exchange of compliments and of apologies for any acrimonious remarks dropped in the heat of debate, the members bade adieu one to the other, and the conference was at an end.

Besides those mentioned, Kersandt, Frankel, Pistor, Günther, and others participated in the debate."

Instructions Concerning the Management of Diphtheria.—According to the Journal de Médecine de Paris (Archives of Pediatrics) the Council of Public Health of Paris offers the following, concerning measures which should be taken for the treatment of diphtheria:

General Instructions.—Diphtheria is a disease which is markedly contagious. All intercourse of children with diphtheritic patients should be avoided. There is no substance known which will surely prevent diphtheria. It is very important to carefully watch the beginning of every throat trouble. It is necessary to nourish children to the highest available point, especially in time of an epidemic, and not to subject them to the prolonged action of a moist low temperature.

Precautions when Diphtheria appears in a Family:

1. It is indispensable that every one should be separated from the patient, who is not concerned in caring for him. This applies in particular to the other children.

2. Those who are engaged in caring for the patient must avoid embracing him, inhaling his breath, and being very near him during paroxysms of coughing. If the attendants have any small wounds upon any portion of the body which is liable to come in contact with the patient, they must be particular to keep them well covered with collodion. They should take pains to keep up their nutrition, and go out several times daily into the open air. The hands and face should be frequently washed in a weak solution of boric or thymic acid.

3. The health authorities should be promptly notified at the first appearance of the disease.

Measures of Disinfection:

1. Substances which have been expectorated or vomited should be disinfected with a solution consisting of fifty grams of chloride of zinc, or sulphate of copper, to a liter of water. Linen, and all clothing soiled by the patient, should be immediately soaked in one of these solutions, and then placed in boiling water, and kept there for at least an hour. All vessels and utensils which have been used about the patient should also be immersed

in boiling water, immediately after they have been used.

2. Whatever be the issue of the disease, the sick-room must be thoroughly disinfected. The operation may be done as follows: All openings into the room having been closed, a pan containing sand may be placed on the floor, in the middle of the room; upon this some burning coals may be laid, and upon the coals a quantity of sulphur, varying with the size of the room, may be ignited. (Twenty grams of sulphur to the cubic meter would be sufficient.) The room should remain closed for twenty-four hours, and then it may be freely ventilated. All the clothing, linen, and coverings, which have been used in the sick-room, must be thoroughly disinfected with one of the solutions referred to. The mattresses should be opened, and left in the room during the process of fumigation.

Two Cases of Fracture of the Spine, With Recovery.—James D. Strawbridge, M. D., of Danville, Pa., writes to the Medical News:

"Some weeks since, while attending a patient near Northumberland with Dr. William B. Stoner, my attention was recalled to the following case, of which I had entirely lost sight. At a subsequent visit the patient met me at Dr. Stoner's office, where I had an opportunity to examine and satisfy myself as to the nature of the injury and its results.

Edward B., an able bodied, healthy man of medium size, about 35 years of age, employed at the lumber mills of Frick, Chamberlain & Co., at Northumberland. On May 18, 1882, having done six hours of continuous work floating logs from the canal, through a narrow channel under the P. & E. railroad, into the sawmill pool, tired and somewhat intoxicated, he sat down to rest on the railway track, and was knocked by a passing locomotive into the pool, from which he was immediately rescued, insensible, apparently with a broken neck, and carried to his home.

A few days later, I was called in consultation by Dr. Stoner and the late Dr. Joseph Priestly, and found the patient on his back in bed, perfectly conscious, suffering but little, without paralysis of body or limbs, his head resting on a pillow, with the face turned strongly to the right, and without power of movement. Having diagnosticated a dislocation of the neck, a decision in favor of immediate reduction necessarily followed. Having placed the patient in a sitting posture Dr. Priestly stood behind him on the bed, and taking his head between his hands lifted steadily until the body was nearly suspended. Dr. Stoner steadied the body while I manipulated the neck. When considerable extension of the neck had taken place, the face turned to the front and the veretebra glided easily into place, but as soon as extension was relaxed, and the head rested on the vertebra, the neck shortened and the face again turned to the right. Upon lifting the head again slowly, a fracture of the third cervical vertebra, through the bifurcation of the spinous process and through the pedicle on the left side was easily discovered. As soon as the head began to rest on the spine, or the erector muscles to contract, the smaller fragment could be felt pressed outward, while the body and right side retained their position; the axis, directed by the right articular facet, glided backward and to the left, into the vacant space, turning the head around to the right.

Having ascertained these facts, it was decided that as soon as a suitable suspension apparatus could be provided, a plaster splint should be applied to the back and sides of the neck to extend from the shoulders, up under the ears and back of the head. The splint was efficiently applied a day or two later, by Drs. Stoner and Priestly, and worn by the patient four weeks. Becoming impatient of its irksomeness, the patient removed it himself, but found he could not yet do without a support for his head and had to have it reapplied. It was worn for three weeks longer and then permanently laid aside. On the 10th of July he returned to his work, and has never since experienced any inconvenience from the injury.

While writing the above, the following case, of which I had no memoranda seeming worthy of record in this connection, I have obtained the necessary data from the patient himself and the attending physician.

In February, 1867, John M., a robust healthy man of not over 30 years of age, engaged in mining iron ore, was coming up out of the mine, and seated himself on the front end of an empty car which was being drawn up the slope. The roof of the mine was very low, compelling him to sit bent forward with his head down, but incautiously rising a little, he was caught on the back of his neck and shoulders by one of the roof timbers, which doubled the body on itself, and as the car advanced dropped him backward into it, a crushed and helpless mass. On reaching the surface he was taken out insible and carried home.

A week after the accident I was called to see him with Dr. B. F. Schultz, of Danville, his attending physician. I found the lower half of the body and extremities paralyzed, the bodies of the seventh, eighth and ninth dorsal vertebræ were crushed into each other, and the sixth and the tenth injured. The heads of the eighth, ninth, and tenth ribs were dislocated on the right side, and the ninth and tenth on the left. The spine from the sixth to the tenth vertebra projected, forming a curve of nearly a semicircle. In this condition he was being moved about in the bed, and raised up when necessary to void his feces, the urine being drawn with a catheter. The attendants were made to understand that he could not be raised up or moved about in bed, and that his only hope for recovery was through maintaining absolute immobility of the spine.

A strong frame was prepared with canvas stretched on it. On this a mattress was fitted with a cavity to receive the curve of the spine; pads were placed on each side so as to keep up a moderate pressure on the necks of the dislocated ribs. A trap was made through the mattress and canvas for removal of the discharges. On this the patient was kept in a horizontal position for thirteen weeks, without other movement than that of being turned slightly to one or the other side to adjust the pads and to cleanse and protect the skin. By that time paralysis had entirely disappeared, the bladder and bowels had regularly resumed their functions, and the bodies of the injured vertebræ appeared to be solidly united. The patient was then allowed to change his position, and soon after to sit up.

At the end of the fifth month he was out of doors walking about apparently well. He has not since suffered from any spinal trouble, has been, and is now, a healthy man. He is somewhat reduced in stature, has a very marked projection of the dorsal spine, and a very stiff back."

Warburg's Tincture.—Dr. D. A. H. Bishop, of Dover, Delaware, writing to the Therapeutic Gazette, (Maryland Medical Journal), says:

"Ever since Warburg's tincture became an officinal preparation I have watched in vain to see some notice in the journals of its use in remittent fevers. I subjoin these notes, hoping to invite attention to the subject.

No one who has used this preparation will doubt its diaphoretic power, the most effective with which I am acquainted; and since its formula has become known to the profession, there can no longer be an objection to its having a fair trial.

Although my experience has necessarily, from my location, been limited, I have reason to believe that the tincture is destined to do a good work. Where I believe it to be most beneficial is in the adynamic forms of remittent fever. It will reduce the temperature, calm the circulation, and give the patient a peaceful slumber, such as is not to be had from any other drug known to me.

During the autumn of 1883 I had under my charge a young man suffering from remittent fever in its most aggravated form. He had already undergone the usual treatment with quinine under the care of a neighboring physicician, but without relief. I placed him, after the use of cathartics, upon Warburg's tincture, giving ℥ ss doses every four hours

during the remission. Its good effect was quickly seen, the fever not returning after the first day.

Since that time I have had many cases with similar results; the fever disappeared after the second or third dose.

If this limited experience entitles me to an opinion, it is most certainly a favorable one. I hope to hear an account of its use in a wider field, where remittent fevers are more frequent and of a more malignant type."

Treatment of Lupus.—A correspondent from Wuerzburg, writes to the "Medical Press of Western New York:"

"Gerhardt has lately employed a treatment for lupus that appears to be very valuable. He applies ice-bags to them during the greater part of the day. He recently showed four cases that were entirely healed over by a very fine elastic scar. He got the idea by arguing that, since lupus is produced by the tuberculosis bacilli and since the activity of these is greatly diminished by cold, by the employment of this his patients might be more benefited than by any other measure. Of course the spores of the bacillus are not so easily affected; but such objections are always to be found in every kind of treatment. That cold, continously applied, penetrates inwardly, he has demonstrated by taking the temperature in both sides of the mouth after the ice-bag had been applied to one of the cheeks for some hours. He found the difference to be as much as 3° Centigrade, in some cases. The attained results certainly speak well for the method."

Pilocarpine in Datura-Poisoning.—The notes of the following case found in the British Medical Journal (Medical News) are valuable. Dr. Ladislas Roth, of Nagy Bajour, Hungary, was called, at 1 p. m., to a little girl, aged 4, in a druggist's shop. She was quite insensible, with widely dilated and insensitive pupils, the face and body being swollen as if dropsical, and covered with a scarlatiniform rash. She was very restless, throwing herself about in all ways, groaning and gnashing her teeth; the pulse was 146, small and weak; the respirations 40, superficial, the temperature 39.5° Cent. (103.1° Fahr.). No urine or stool had been passed since the commencement of the symptoms. The mother said that other children had told her that the child had eaten two handfuls of sweet ripe stramonium-fruit, and, when she saw her at 11 o'clock, she had seemed ill, and unable to stand on her feet. She had called the Government medical officer, who prescribed a mixture containing two grains and a quarter of tartar emetic. The druggist, however, being of opinion that that would not do any good, took upon himself to give a solution of sulphate of copper instead. In the vomit which the copper had produced a number of berries of datura-stramonium were seen. Dr. Roth, remembering a case of atropine-poisoning he had seen reported by Professor Purjek, which had been cured by pilocarpine given subcutaneously, administered, at 12 o'clock, half a centigramme (one-fourteenth grain) of pilocarpine, in five centigrammes of water, by means of a Pravaz's syringe. No salivation or sweating followed, and no improvement was detected; and, at a quarter to three, a centigramme was given. The red rash and the swelling diminished. At three, another centigramme was given. The child cried, and shortly began to show various signs of improvement. The injections were continued. Up to 5 o'clock, eleven-fourteenths of a grain had been given. At six, the pupils had become almost normal, and the pulse 120, and temperature 103.6° F. She was able to speak quite plainly, and wanted something to eat. All this time, there had been no sweating. At 7 o'clock, as her condition appeared somewhat less satisfactory, half a centigramme more was given, and this brought on both salivation and sweating. She made a rapid recovery. Altogether, six-sevenths of a grain of hydrochlorate of pilocarpine were administered, five of which, the writer considers, were required to neutralize the datura.

Active Principles in Pharmacy.—Dr. R. G. Eccles, of Brooklyn, contributes to the "Pharmaceutical Record" an important article on "Infected Solutions," beginning with the following remarks (New York Medical Journal):

"Aromatic waters, dilute solutions of phosphoric, citric, tartaric, oxalic, and other acids and their salts, as well as most alkaloidal solutions, encourage a growth of a variety of aquatic cryptogamous plants, whose polluting presence renders them unfit for use. They are unwelcome visitors everywhere, but in the last mentioned places they are a great commercial misfortune, so that their suppression is a subject of growing interest. That it will continue so to grow is apparent from the trend of medical science. Every advance made by therapeutics discredits the use of tinctures, infusions, decoctions, extracts, etc., as at present indiscriminately prescribed.

"1. Because all medication is found to be an injury to the system, and on no account to be indulged in except to suppress a greater evil.

"2. Because these preparations almost invariably contain some drug not needed by the patient.

"3. Because they often contain drngs positively contra-indicated by the disease, combined with such as are pressingly necessary for the same.

"4. Because the strength of such preparations is never twice alike, and it is merely an accidental guess when the proper dose is given.

"5. Because the physiological effects of many drugs are found to border upon the toxic. If too much is given the patient is injured; if too little, he is insufficiently or not at all benefited.

"This is why the alkaloids of cinchona have, to so great an extent, displaced the older forms of administration. This is why those of belladonna, nux vomica, and opium are pressing forward in the same direction. This is partially why cocaine has been found so useful at a time when coca was about to be thrown aside as of little value. The day of active principles in pharmacy is only beginning. Every year must add to their popularity, and discredit to a great extent all that now take their places. Definite solutions like Magendie's will ere long be in daily call, and these will represent all the virtues of the vegetable world. There will then be no stimulating with alcohol when a depressant is desirable, nor constipating with tannin when heart pressure only is needed. Hypodermic medication points the way we are bound to travel, and in this method of practice all the old drug preparations are worse than useless. All the changes here foreshadowed will not come in our day. Enough, however, will come to make the loss from infection become an item of financial importance. Cocaine at ten cents a grain and eserine at twenty-five are worth saving. If we could calculate the loss upon the former from this cause during the past year it would no doubt amount to a snug sum."

Rare Symptoms of Locomotor Ataxy. M. Charcot has recently had under his care, at the Salpétriére Hospital (Journal de Médecine et de Chirurgie Pratique), a man, aged 52, who was suffering from locomotor ataxy. Besides the usual symptoms, the patient presented the peculiar deformity known as tabic foot. The right foot was broader and thicker than the left, and the arch much less marked. There was neither edema nor pain. Professor Charcot is of opinion that the absence of pain and inflammation is a most important point in the diagnosis of all diseases of the joints caused by locomotor ataxy. M. Charcot's second case was that of a man with symptoms of tabes and anesthesia of the face; the loss of sensibility had begun in the upper lip, and invaded gradually the whole of the face, the mouth, and the soft palate; but the sense of taste was still retained. There were patches of anesthesia on the chest, and of hyperesthesia on the back. The patient presented also some remarkable trophic lesions; he had lost nine teeth without pain in one month, and at the same time small pieces of the inferior maxilla had become detached. The disease of the jaw showed, however, a decided tendency to spontaneous cure.

CONTRIBUTION.

INFLUENCE OF THE CONTINUOUS USE OF COCAINE ON THE MIND

BY ALEXANDER B. SHAW, M. D.

Associate Physician to St. Vincent's Institution for the Insane. Late Lecturer on the Principles of Diagnosis, Missouri Medical College, Etc,

The remarkable local anesthetic properties of cocaine, especially when applied to mucous surfaces, has secured for the salts derived from the alkaloid of erythroxylon coca a prominent place in both the medical and secular prints of the year, and articles extolling its virtues have appeared so frequently that there is scarcely an intelligent reading man in any walk of life that has not been impressed with the belief that a new remedy has been discovered that is good for many if not most of the aches and pains that humanity is heir to. Cocaine, like opium, chloroform, ether, chloral, quinine, alcohol, etc., is truly deserving of high rank in the physician's armamentum medicorum, but its remarkable properties as a stimulant have already led to its abuse, and from the fact that within the past few months three cases of what may be called cocaine habit have been under my observation, I greatly fear that unless we, as the natural guardians of the physical and mental health of the masses, are extremely cautious, much will yet be written about the evils resulting from the popularization of a drug the use of which has caused untold misery to many of the natives of South America.

The stimulating, exhilarating effect of cocaine is doubtless due to temporary hyperemia of the nervous centres. This hyperemia is quickly induced and is comparatively of but transient duration.

From one to three minutes after a hypodermic injection of from one-half to three-fourths of a grain of cocaine, provided the subject has not already been using larger doses, an apparent swelling of the features from contraction of those muscles which, when contracted, produce an expression of happiness or pleasure, flushing of the face and brightening of the eye with dilatation of the pupils occurs; the pulse is accelerated; every emotion is pleasurable; a happy frame of mind is produced: a roseate hue like a beautifying veil (whose texture, however, is so etherial that its existence is not appreciable to the patient) overspreads every object, circumstance and thought.

Business cares cease to trouble. Hope is in the ascendancy and only the brighter side of life with its varied responsibilities is observed. One seems whirled along on the chariot of fleet-footed time, oblivious to all perplexities and annoyances.

In a few hours, however, reason resumes in part her sway and the subject soon realizes that he must have been in dream-land, for again those cares, perplexities and annoyances that were sunk fathoms deep in the dark sea of oblivion, but an hour or two ago, have returned with increased potency to worry and depress.

So quickly is the stimulant effect of cocaine manifested, especially when used hypodermically, that it cannot be administered without the recipient's observing the relation between cause and effect, and as a result of the knowledge thus acquired, slight, indeed common, causes of dejection are enough to bring to remembrance the pleasurable effect of a hypodermic injection of cocaine and a desire for the same.

Once a man flies to cocaine for relief from those "cares that annoy," he generally continues with rapid strides towards such complete subjugation to its bewitching thraldom, as but few will ever be rescued from by any powers of will which they may be able to bring to their aid.

As the exhilaration is but transient, before long many injections are required daily and, pari passu, with increased frequency there is an increased dosage.

One of the patients referred to was taking twenty and twenty-five grains daily when cocaine was worth thirty-five cents a grain; cocaine costing him about $3.75 per day or about $262.50 per month. Soon the cocaine captive ceases to desire ordinary food, feels that he cannot masticate nor swallow it because of a sense of dryness and stiffness of the pharynx. And unless resort is had to nourishment in liquid form, such as milk, beef essence, soups, etc., which, if I may use the expression, may be "bolted," he rapidly emaciates, becomes anemic, weak, nervous and irritable. Indulgence in cocaine is productive of insomnia, and this increases the nervous irritability, impressibility if you will, and surely leads to marked illusions and horrible hallucinations.

While cocaine has for a time the power to cause one to forget or to recognize as of but trivial importance matters which, in the normal condition of mind, would create considerable anxiety, it also causes its subject to be-

come suspicious of his best friends, even of his wife and children; he is in a state closely resembling, if it is not entitled to the name of, melancholic with excitement. He seems to be no longer capable of realizing the mutual obligations connected with the transaction of ordinary business—becomes suspicious of his partners or other associates, fancies that there is some deep laid plan for his injury about to be put into execution, takes offence where none is intended, and magnifies an unintentional slight into a casus belli of wonderful proportions.

His moral emotions are under the dominion of the baser passions. He relinquishes, even without cause denounces, his former associates and receives on terms of equality, with protestations of great friendship and regard, those far his inferiors and with whom he would have been ashamed to have associated prior to his subjugation.

Religious convictions lose their power. Sometimes he is careless as to what men may say about him, for his opinion of himself is so good that he will defy anyone to injure his good name. At others, every man's hand seems to be against him, and from a state in which there is an assertion of the greatest bravery and ability to inflict punishment, physically and otherwise, he will in an hour become a coward physically and morally, and submit to great indignities with the whimper and whine of a whipped child. In a short time an injury—business failure, financial loss or other common cause of anxiety—will be temporarily forgotten or remembered as a farcical episode, and everything will appear in roseate hues and attractive forms.

Business engagements are forgotten or neglected, the subject lies to himself and does not hesitate to lie to others, and, strange to say, seems to fail to realize that his utterances may be discovered to be utterly false, notwithstanding the fact that while greatly stimulated by cocaine he is very loquacious and seems to have an excellent memory respecting all that he speaks of.

Two of the patients seemed to no longer feel the necessity for adapting themselves to their surroundings. Their mental equilibrium was so disturbed that all with whom they came in contact deemed them queer, and their intimate friends considered them insane. And they were beyond doubt in that condition known as moral insanity.

In one instance the patient had been a subject of the morphine habit for many years. Cocaine was used to eradicate the desire for morphine; for a time it did so, but within one month from the time he began the use of cocaine, he was using both cocaine and morphine in large quantities, and, contrary to published accounts to the effect that cocaine destroys the desire for strong drink, this patient, although never to my knowledge really intoxicated, frequently imbibed from half a pint to a pint of whisky in twenty-four hours' time. He asserted that sometimes he had to drink to get rid of the horrible spectres that kept him company during the midnight and early morning hours and to secure sleep.

Cocaine renders its victims careless—careless as to neatness of personal attire, careless as to personal effects, careless as to business affairs, careless as to social standing, careless as to the fulfillment of sacred trusts, careless as to friendship's demands, careless as to religious requirements. In short, while by turns brave or cowardly, hopeful or depressed, he is almost continuously suspicious, careless and forgetful.

The following lines by a gentleman who resorted to cocaine to relieve mental depression are full of meaning, and quite correctly express some of the results of the use of cocaine:

Have you heard of the stuff—they call it cocaine?
When you taste it once you will need it again;
Your spirits and pulse together they soar
Into regions of bliss! To think of no more
The pangs and the sorrows, the grief and the care,
They are banished and vanished into very thin air.
But the spell is soon broken, the charm has fled,
And all your bright hopes are shattered and dead.
This grim dreary world again you behold!
To repeat the same story that has often been told.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, Oct. 17, 1885. The President, Dr. Atwood, in the chair.

PELVIC HEMATOCELE—SPONTANEOUS CURE.

DR. GUHMANN, on the 20th of April last, was called in to see a women at 7 A. M. She had been delivered of a child, and complained of a continued pain and straining about the rectum and vagina. A digital examination revealed the presence of a tumor which also protruded slightly out of the vagina, and over the perineum. Upon the extreme outer part of the tumor there existed an abrasion.

The woman was weak, faint and nauseated; the bladder full and distended. A catheter was used to draw off about three pints of urine. Opium rectal suppositories, ice, morphia and bicarbonate of soda, internally, were ordered. Antiseptic injections were also given. At about 11 o'clock the vagina and rectum were entirely filled up by the tumor. At five o'clock the bleeding had stopped and the women felt more comfortable. April 21. Fever came on with abdominal pain. The tumor not diminished in size. April 22. During night much pain over abdomen; tenesmus of rectum and vagina, temp. 104° F., pulse 130, dry tongue. Dr. Yarnall was called in and he said it was the largest hematocele he had ever seen. Dr. Gregory was called, but when he arrived to examine it, the tumor had bursted. Grumous blood of an offensive smell littered the bed. Injections were continued, the women improved, and in eight days nothing was to be seen but the cicatrix.

Spontaneous Combustion (?).

Dr. Middlekamp, of Warrenton, detailed the following remarkable case. In October, 1883, a citizen of Warrenton went out with his gun on his shoulder and did not return. It was supposed that he committed suicide. On the fourth or fifth day after the remains of a man supposed to be him were found. He was sixty-six years old, had been intemperate for twenty years, and was fat and bloated. The gun and ramrod were found, and the head, hands and part of forearms, feet and part of the lower legs. The rest of the body was entirely consumed. It seemed as if he had the gun at his chest and that the charge had set him on fire and burned him The pelvic bones and vertebrae were there in the form of ashes. The flame had scorched a tree and melted a buckle of the man's belt and the buttons of his pantaloons.

Dr. Scott inquired how the man was dressed.

Dr. Middlekamp replied, partly in woolen and partly in cotton clothing.

Dr. Scott regarded the case as a very strange one, and was inclined to believe that some one else had a hand in burning him.

Dr. Middlekamp said that there was no evidence of anyone having been there. He supposed that the man's system was so saturated with alcohol that when he shot himself he took fire and burned up.

Dr. Thornton related how Dickens, in one of his works, had related a case of spontaneous combustion, and had cited actual cases in support. Dr. T. had read in a medical jurisprudence accounts of eight cases, and in each of these the head and extremities alone remained, there being no signs of fire around them.

Dr. Hurt thought that if the fat began to burn it would prove as combustible as any oil.

Dr. Thornton then called attention to the fact of the difficulty experienced in burning cadavers.

Dr. Middlekamp was inclined to regard it as a case of spontaneous combustion.

Dr. Scott thought that there was something beyond this. In all cases, however, which he had seen in which death resulted from burning of the clothing there was only a cooking of the flesh. In cases where people were burnt in buildings the charred remains were generally found. As to alcohol remaining in the system, he was inclined to doubt it.

Dr. A. Green wished to know why specimens kept in alcohol did not burn up spontaneously, if the presence of this agent in the body produced such an effect. He was inclined to believe as Dr. Scott did.

Dr. Atwood suggested that the suicide and spontaneous combustion might have been a co-incidence. He had seen a man burned in an intensely hot flame for nine and a half minutes and the body was not much burnt.

Dr. Dickinson called attention to the fact that it takes three hours to incinerate a body in a crematory.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, held October 5, 1885. The President, C. T. Parkes, M. D., in the chair.

Intubation of the Larynx, with a Report of Five Cases.

Was the title of a paper read by Dr. F. E. Waxham. The paper was supplemental to one read before the society on April 20th, in which the operation was minutely described. Dr. Waxham exhibited a larynx with the tube in situ. He described the manner of performing the operation, as follows, by the nurse holding the child in her lap, with the hands at the side, an assistant firmly holding the head backward. The mouth is held open by a gag placed on the left side between the teeth. The tube, armed with a silk bridle, well waxed, is now secured to the introducing instrument. The right hand manipulates the instrument, while the index finger of the left hand guides safely and quickly the tube over the epiglottis into the larynx, when the introducing instrument is removed and the tip of the finger presses the tube well down into the

larynx. We make sure the tube is in proper position by the easier breathing, the tube remaining stationary, and by coughing on the patient attempting to swallow water. The bridle of silk is apt to produce violent coughing, and is generally removed. The latest improvements in the tubes consist in an enlargement of the head of the tube with a backward curve, preventing the tube from slipping into the trachea and allowing the epiglottis to fall during the act of deglutition. There is also an enlargement in the center of the tube, allowing it to be more easily extracted. Dr. Waxham reported in detail five cases of croup treated by intubation. One case recovered, one died six days after intubation from pneumonia, the result of unfavorable surroundings. The other cases were not such that recovery could be definitely expected. Dr. Waxham then presented the history of the five cases in detail, after which Dr. H. T. Byford opened the discussion by saying he had the pleasure of seeing the case reported in which there was a complete recovery. In the contrast between this operation and tracheotomy there are many points in favor of intubation, and there are not many cases in which tracheotomy is indicated that intubation is not,one of its chief advantages being its simplicity. The first case of tracheotomy he had ever performed was a success and gave him a great deal of encouragement, but the next was such a terrible case, and a failure, that he was discouraged. He had assisted at several tracheotomies, but the difficulties of the operation, the trouble of overcoming the prejudice of the parents against the operatian, and the difficulties and bad results following, had caused him to abandon the operation as of little use except in good cases. But when he saw this case, with all the absence of numerous attendants and paraphernalia in the after-treatment, and the comfort and freedom of the patient, he was greatly astonished. The simplicty and safety of the operation and the comfort afterwards, the fact that the consent of the parents can be easily and early obtained, that failure to relieve will not bring discredit upon the physician, and that the tube opens in the throat instead of the external air, leaves no doubt in his mind that intubation, whenever it can be successfully accomplished,will supersede tracheotomy in private practice.

Dr. W. E. Casselberry said he was in constant attendance on one of the cases which terminated unfavorably, but the effect from the opdration was such as to convince him of its utility in many casas. In this case the former physicians in attendance had thought the patient had recovered from diphtheria, but the membrane later invaded the trachea. The young child was in extremis mortis and it was decided tracheotomy would be of no avail, and it was not thought intubation would be much better, but in order to give the child a chance it was done. The child lived twenty.four hours, and its last hours were comparatively comfortable. In this case there was considerable difficulty in the introduction of the tube, and it was a lesson to him that practic in introducing the tube on the cadaver might obviate many difficulties in introducing it on the living subject. In the case of this young child the tube attached to the instrument for introducing it made too short an angle to be easily introduced. The idea suggested itself to have a joint in the introducing instrument so as to be able to easily pass the curve of the pharynx. The tube caused no cough or difficulty in swallowing, and was easily withdrawn. A German physician lately states that in 111 cases of tracheotomy under his control, sixty-three recovered, and an American physician notes twenty cases, of which nine recovered. It seems from these statistics that tracheotomy is not to be discarded, but we nevertheless will find a large field for intubation of the larynx. Intubation will be preferable in young children not apt to recover from tracheotomy, in diphtheritic cases, and in cases when the friends object to tracheotomy.

Dr. R. G. Bogue said: I have happened to have something to do with tracheotomy. While there are a great many inconveniences attending the operation and the care of the patients, subsequently, there certainly has been a good deal to commend its performance in many cases. The number of recoveries after tracheotomy are not few. The gentleman preceding me referred to statistics showing a larger percentage of recoveries than I had happened to know. But those who have operated a goodly number of times have good reason, from its success, to resort to it in many cases. Intubation is a simple operation compared with tracheotomy and will recommend itself in many ways, and if it proves to be of equal succecs in saving life, it should be used in preference to tracheotomy. Many reasons arise why it should be used. It is not a formidable operation; parents' consent to it can be easily obtained, and the relief obtained by intubation seems as great as in tracheotomy. After each tracheotomy there is a period of rest and quiet and apparent promise of success, for a period of twenty-four to thirty-six hours, then an extension of the disease into the deeper air passages, or some complication destroys the life of the pa-

tient. The benefit of intubation with only this alleviation is apparent. It is to be hoped after a more extended trial it will prove to be of as much, if not more, service than tracheotomy, and it will commend itself to the profession.

Dr. G. C. Paoli said Dieffenbach, of Berlin, was the first to use intubation in diphtheria and croup, and a Parisian physician tried it at the time, each without the knowledge of the other's experiments. Dieffenbach used an india-rubber tube, but he as well as the Parisian physician abandoned intubation. This is a different method, it is true, but it never can be recommended until we have statistics from those having great experience, in hospitals especially, to prove it preferable to tracheotomy.

Dr. D. W. Graham commended the report as being an effort in the right direction. It shows that intubation has some merit, as a means of treating obstruction of the larynx, and that it is destined to become at least a partial substitute for tracheotomy in diphtheritic croup. From a theoretical standpoint it would seem that there would be some liability of these tubes causing edema of the larynx, if retained in place any length of time, on account of the mechanical pressure on the veins of the mucous membrane. Future observation will show whether they are entirely harmless. However, there does not appear to have been any trouble in this respect in the cases reported.

If this method should become established and recognized, as it now promises, it would and ought to be counted as a new procedure, notwithstanding what Dr. Paoli has said about the efforts of the older surgeons to put the same idea into practice, for whatever has been attempted heretofore in this direction has proved fruitless.

Dr. Waxham, in closing the discussion, in answer to various questions, said the longest time the tube was worn continuously was six days. Dr. O'Dwyer reports two cases, terminating favorably, in which the tubes had been worn ten days. He never found any edema of the larynx caused by the wearing of the tube. In very young children it is necessary to remove and cleanse the tube. Older children, if not exhausted by disease, will expectorate freely. The previous attempts at intubation in France were not successful, but they were not according to the methods now employed. Trousseau discouraged intubation, and thus French physicians were influenced against it. The tubes must be thin, but their weight is unimportant. He had never found it necessary to use cocaine in introducing the tube, as this operation is generally easily and quickly done.

Laparotomy in a Case of Gun-Shot Wound of the Intestines.

Was the title of a paper read by Dr. Augustus V. Park. He said: M. S., a butcher-boy, aged 16, of slight stature, formerly in poor but lately in good health, was shot on September 1st, 1882, at 3:30 p. m. A pistol ball, of calibre 22, fired from a distance of forty-five feet, entered the abdomen at a point midway between the symphysis pubis and umbilicus, two inches to the left of the median line. The patient was removed in a farmer's spring wagon from the place where he was soht to his home, a distance of seven miles. A dressing was applied, and at 1 p. m., the next day, he was taken to the Michael Reese Hospital. The patient arrived nearly exhausted; his temperature was 100° F., pulse 130, weak and intermitting. His respirations were 30, his abdomen tympanitic, especially high on left side. There was no liver dullness, giving rise to a theory that the liver was crowded upward by extravasated blood. At 1:30 p. m. laparotomy was performed, the incision being made directly over the seat of the wound. We could not find any wound of the peritoneum, or where the ball passed through it. As the peritoneum was opened, decomposed blood rushed through the opening with great force. Blood and blood-clots which quickly formed were removed with sponges; the intestines were drawn out and examined for wounds. The first wound found was an abrasion, the ball not having entered the intestine. There was but little hemorrhage, and the wound was closed by the interrupted cat-gut suture. The second wound, half inch in diameter, opened directly into the intestine. A small mesenteric artery was found divided and tied. All hemorrhage ceased. The wound was closed by interrupted suture; no further injury could be detected. The abdominal cavity was cleansed with one (1) per cent solution of carbolic acid; the intestines were washed, carefully examined and returned. The abdominal incision was closed by two sets of sutures, the peritoneal surfaces were approximated and closed by continuous suture.

At 5:30 on the morning after the operation the patient died. Seven hours later an autopsy revealed commencing peritonitis, the small intestines being apparently agglutinated together. A few blood-clots and a quantity of extravasated blood were found in the peritoneal cavity on the left side. A contused

wound of the rectnm was found near the sigmoid flexure, the ball being deflected from this position into the muscular tissue below, where it was found imbedded. This case justifies the opinion of various eminent surgeons that we cannot tell the direction the bullet takes from the position of the wound of entrance or exit. From the conditions existing in this case, he was of the opinion the case would have terminated favorably had he been able to perform, with antiseptic precautions, laparotomy immediately after the injury.

Dr. F. E. Waxham said Dr. Park was entitled to a great deal of credit for presenting to the society his paper and the specimen, because it is the report of a case which terminated unfavorably. He thought the chances of the patient would have been better if he had been allowed more quiet. His frequent removals must have loosened the blood-clots and increased the hemorrhage and prolonged the shock. If he had recovered he would have thought it almost miraculous, for it is one of the maxims of abdominal surgery to have complete and perfect quietude for the patient.

Dr. R. Tilley said the surgery of gun-shot wounds of the abdomen is interesting to every member of the profession, no matter in what particular direction his favorite studies may lead. Any one of us may find ourselves confronted with the responsibility associated with such cases when delay in action may be culpable. Relative to the case before us, he should not only not consider a recovery miraculous, but deem the conditions associated with it more favorable than, on the average, can be expected. One of the conclusions formulated by our President before the American Medical Association in Washington in 1884 is, in opening the abdomen to look for gun-shot wounds, the incision should be in the median line, regardless of the bullet wound. This procedure certainly facilitates efficient inspection, but in the present case it was ignored. He regretted that the cause of failure of the operation has not been thrown into stronger relief, and he felt like asking our President, Dr. C. T. Parks, to formulate the lessons he would draw from the failure of this operation. Of course, the case will go on record as one of operation after gun-shot wound of the abdomen associated with failure, and will tend to develop hesitation in the mind of the general practitioner about a class of cases which, in his opinion, called for urgent, prompt operating.

Dr. Bogue said there were a few lessons to be learned from this case. One is the advantage which would follow an early operation, before the blood, or fluid in the abdominal cavity, decomposes. An operation should be made before the irritation from this source is severe. Another lesson is the necessity of a thorough exploration of the abdominal cavity for the purpose of discovering and removing any foreign substance which may be in it. It is necessary to control hemorrhage, by opening the abdomen and having free access to every part of it.

Dr. J. H. Etheridge said that it will be noticed the pulse-rate was high after the operation, which lasted two hours. The question arises, if we cannot account for death on the opinion that it was due to the action of the ether on the cardiac nervous system. Was there acute poisoning from ether? Or was death caused by septicemia? He wished to thank Dr. Park for the report of this case, because it is from the reporting of these unsuccessful cases we obtain the most benefit. He did not believe it would deter any one from doing abdominal surgery, as it had already taken such a rank that the report of one unsuccessful case would not intimidate any surgeon, but enable him to steer clear of difficulties others may have encountered.

The President said: Your chairman feels somewhat diffident about making any remarks, because his experience in connection with gun-shot wounds of the abdomen was solely in connection with the results of experiments upon the lower animals.

There is one fact demonstrated by this case, and it stands out in all the cases, of which I know, operated upon in man, which corroborates the results of the experiments made by myself, and that is, the necessity of free incision through the median line of the abdomen, without any reference to the course of the bullet, as the best way to get at the injury so as to determine its extent, and to apply the means of repair as well as to secure a clean abdomen. Another item mentioned in the case is the one that blood flowed freely from the bullet wound while the patient was in the erect position and ceased when he was recumbent. As the bullet passed through parts of little vascularity, this item points to the wounding of some large vessel internally (as was found), and becomes a point of value in the question of perforation. This question of perforation is no easy one to settle positively, even in the best of hands. I am inclined to agree with Dr. Waxham in the opinion that it was not the best plan to remove the patient from his home before operating, notwithstanding his bad surroundings. We must take into consideration the fact that this

patient was accustomed to his surroundings, and far less likely to be harmfully affected by them than by the incidental to the jolting movements of removal.

Some of the accidents of the case I am sure would have been avoided by obeying the rule of open incision in the median line. Post mortem showed considerable old blood in the cavity; this would have been found and removed. The paper states no extravasation of bowel contents was noticed; the non-existence of such condition has doubt thrown upon it by the condition found in post mortem. The wound in the rectum would have been discovered, and the section of the bowel displayed shows an untouched perforation of its walls; probably the wound of entrance of the bullet. The exit wound is sewed up.

The manner of closing the external incision as well as the bowel wounds should be such as to save time in the operation, by using the continuous cat-gut suture for small bowel wounds and single through and through suture of the abdominal incision. It is pure waste of time to unite the latter in layers.

It is a matter of some pride and great pleasure to me to know that the principles enunciated by me as the results of experiments on the lower animals (especially as they are ridiculed by some) have so recently been put to a severe but successful application upon the human body. Dr. Bull, of New York, had a successful case of nine perforations, and Dr. J. B. Hamilton, of Washington, D. C., also a successful case with eleven perforations.

In Dr. Hamilton's case, the only bad happening arose from the formation of a blood tumor—probably, as Dr. Hamilton says, forming from a grazed surface, the bleeding from which could not be controlled. This was subsequently opened through the rectum and the patient recovered. But it is interesting to notice that the patient was in greater danger of his life from this mass of blood than from the wounds in the intestine after they had been closed. It shows also how necessary it is to prevent bleeding by securing, if possible, all bleeding points.

After the pathological specimen was examined the Society adjourned.

MICHIGAN STATE BOARD OF HEALTH.

[REPORTED FOR THE REVIEW]

Transportation of Corpses.

At the regular quarterly meeting of the Michigan State Board of Health, held in Lansing, October 13, 1885, complaint was made of bad odors and nuisances arising from corpses transported in Michigan. The Secretary instanced the case of the body of a woman recently taken from Hersey to Albion. Besides this undoubted nuisance, the body was suspected (although it cannot be proved) of conveying diphtheria to two young women of Albion who died of that diseases. Corpses are usually carried with baggage under them or piled upon them, and it is claimed that the fluids not infrequently run out of the boxes and across the baggage car. It seems desirable that there should be greater uniformity and care in packing bodies for transportation, even in cases where no contagious disease is suspected. In this connection, the Secretary reported that by invitation, he attended, September 16, in Lansing, a meeting of the Michigan Association of General Baggage Agents, and took part in the discussion of the subject of the meeting, "Transportation of Dead Bodies." At that meeting, a committee was appointed to draft "Rules" for the guidance of agents of railroad companies in the transportation of dead bodies. The chairman of that committee, Mr. H. P. Dearing, the General Baggage Agent of the Michigan Central Railroad, appeared before the Board, and presented the Rules as adopted by the committee. He said the design was to make a set of rules that would meet the views of the several State Boards of Health, and be adopted by all the great lines of railroad in the United States, so there shall be uniformity of practice, and thus better protect the lives of railroad employes and of travelers. Rule 1 absolutely prohibits the transportation of bodies dead from smallpox, Asiatic cholera, typhus fever and yellow fever. Rule 2 provides that all other dead bodies may be transported provided they are encased in an antiseptic interment sack, hermetically sealed, in addition to being in a coffin and this in a tight, wooden box, except those dead of diphtheria, scarlet fever, typhoid fever, erysipelas, measles, or other contagious and infectious diseases, which must be wrapped in a sheet thoroughly saturated with a strong solution of chloride of zinc—one-half pound of the chloride of zinc to a gallon of water, before being encased in the hermetically sealed sack. The coffin must be surrounded by sawdust saturated with a solution of chloride of zinc the same sterngth as stated above. Rule 3 specifies that no person or article that has been exposed to the infection may accompany the body. Rule 4 provides that some one must accompany the body; and forms for certificates are given.

After discussion of the subject, the Board approved the rules.

Small-Pox in Canada.

The Secretary stated that while the inspection of travelers to keep out small-pox was under the direction of the United States Government, he passed through it in coming from Canada to Michigan, and examined somewhat in detail the methods employed. Since the Board took charge of the inspection, he had visited Detroit and consulted with reference to the inspection, and he had suggestions to make for its improvement. He also stated that small-pox is reported to have spread from Montreal to many cities and villages in Canada, and also to Maine, New Hampshire, Vermont, Mossachusetts, Rhode Island, New York, and Illinois. Michigan, the most exposed of any State, has so far escaped—no authentic report of a case having been received. Many pieces of baggage from Montreal have been disinfected by the inspectors at Port Huron and Detroit, and one convalescent from small-pox has been stopped at Port Huron for disinfection of all material liable to spread the disease.

The subject of the inspection against small-pox was considered by the Board. It was decided that the rules in regard to disinfection of articles from an infected district apply to freight and cars and to freight from infected districts arriving by boat consigned to places in Michigan. A rule was made that no passenger car from Montreal or other infected district shall be allowed to enter the state without being properly disinfected. The Board decided to appoint one additional inspector at Port Huron, and two at Detroit. It was also decided to appoint two assistant inspectors at Detroit.

The Secretary was directed to get into communication wtih as many lumbering camps in Michigan as possible; to send them pamphlets giving best methods for the restriction and prevention of small-pox by vaccination, isolation and disinfection, to urge the importance of the vaccination of the employes, and to assist them in procuring virus. It was also suggested as advisable that lumbering contractors should not employ unvaccinated persons. A resolution was passed to the effect that, in view of the fact that small-pox is now prevalent in towns and cities in Canada in direct communication with this state, all health authorities be requested to encourage vaccination of citizens in their respective townships, cities and villages. A letter from Dr. A. E. Bacon, Health Officer of Sault Ste. Marie, was read, in which he states the exposed condition of that village to small-pox. The Board decided that the appropriation would not warrant the payment of inspectors outside of Detroit and Port Huron; but in order to co-operate with the local board so far as possible, authorized the health officer of Sault Ste Marie to act as inspector under the State Board without pay from the state.

The next regular meeting of the Board will be on the second Tuesday in January, 1886.

CLINICAL LECTURE.

ON PHTHISIS PULMONALIS.

Delivered at the Post-Graduate School during the Summer Session of 1885.

BY JAMES K. CROOK, M. D.,

Instructor in Clinical Medicine at the New York Post-Graduate Medical School (Intermediate Term); Assistant Physician to the Out-Door Department of Bellevue Hospital.

Lecture II.—The First Stage of Tubercular Phthisis.

This young man is J. S., aged 19. He is learning the carpenters trade and is engaged in that business daily. He is tall and athletic in appearance. You will be struck by the transparent pallor of his skin and the brilliancy of his eyes. While at work about 3 weeks ago he noticed a peculiar taste in his mouth and when he wiped his lips with his handkerchief he found that it was stained with blood. The blood he says produced a tickling sensation at first and was removed by slight efforts at coughing and clearing the throat. It was charred and slightly frothy in appearance and continued to stain his saliva for about an hour. He tried to assure himself that it came from his gums at first—as he was in the habit of picking his teeth, but on examination he could find no wound or abrasion which might have given rise to it. The hemorrhages have been repeated every few days and last Tuesday night while in bed he was seized with a spell of unusual severity in which he lost several ounces of blood. He took great affright at this attack and for this reason he applies at the dispensary for treatment. When we question him in regard to hie previous history we learn that both of his parents died of consumption, the mother only a few weeks ago. He has had most of the diseases incident to childhood, but he has always been strong and vigorous and does not

remember a day's illness since infancy until three weeks ago. He admits, however, that he weighs fifteen or twenty pounds less, and is not so strong as he was last winter, and that he has profuse nightsweats. All of this he attributes to the hot weather and did not stop work until the beginning of the present week. When I ask him if he has a cough he says that he has not except during the hemorrhagic seizures; but even as we talk to him we notice every few moments a single dry hack. He confesses that he has had that for several months and that his friends have frequently called his attention to it, but he did not suppose that it amounted to a cough and was hardly worth mentioning. The expectoration consists chiefly of transparent frothy mucus, except on arising in the morning when it is yellowish and purulent. His appetite is bad recently and he often experiences chilly sensations. His temperature now is 102 and his pulse is 145 to the minute—probably somewhat quickened by the excitement of an examination.

Thus we make out a very strong history. The patient has a number of well marked symptoms, but the only one which he considers of importance is the hemoptysis. It is likely that he would have deferred seeking medical advice even longer were it not for the prominence of this symptom. Such patients are extremely averse to looking upon their symptoms as of serious portent and it is for this reason that we see so small a proportion of cases of the early stages of phthisis in dispensary practice.

On physical examination we do not find evidences of great emaciation. The patient is well built and his chest is broad and well proportioned. We notice on a deep inspiration that the respiratory movements are somewhat restrained. There seems to be a certain want of expansion at the upper part of the chest, but it is difficult to say wnether it is more marked on one side than the other. The patient seems to raise the left shoulder a little higher than the right during a deep inspiration, but this may not be abnormal. I do not attach much value to inspection of the respiratory movements except in advanced cases of phthisis or in pleurisy with effusion. But inspection reveals one thing of no little importance in this case; the right clavicle is constantly much more prominent than the left. On palpation I find this appearance corroborated, and in addition I find the vocal fremitus greatly exaggerated at the summit of the chest on the right side. When I percuss the chest in this situation you will observe that the note is short and diminished in resonance; not absolutely dull, but greatly lacking in the clear pulmonary quality of the normal percussion note. While percussing this part of the chest my attention is called to another physical sign which I consider of great importance. When I strike the finger which I lay on the chest to act as a pleximeter a peculiar hard, unyielding sensation is imparted to it from the chest wall. This is known as the "sense of resistance" and is very significant of consolidation of the lung or of pleuritic effusion or thickening. It can often be appreciated when the ear fails to detect any difference in the percussion sounds. In other parts of the chest there are no variations in the pitch of the percussion note. It appears to be pulmonary in quality and we cannot say that there is anything abnormal about it. Different chests often vary widely in the quality of the percussion resonance even in perfect health. On applying my ear to the chest I find over the area of dullness a large number of fine crackling râles mingled with others of a coarser quality. They are heard during both expiration and inspiration, and are confined to the upper part of the right lung. The breathing in this situation is completely masked by the râles so that its character can not be determined. In other parts of the chest the respiration is high-pitched and exaggerated, but no râles are present.

The history and physical signs of this case lead as to an unequivocal diagnosis. We are amply justified in terming it the first stage of phthisis, and if we wish to be more exact we may say tubercular phthisis. While I believe the formation of tubercles in the lungs to be a factor in nearly every case of pulmonary consumption, it is not always the starting point of the disease. It is of no great importance clinically and many practitioners make no distinction between the different forms of phthisis (except fibroid), but in studying the natural history of disease it is hardly possible for us to be too careful or painstaking. Though it does not affect the treatment in regarding this as a case, tubercular in its origin, it has, as we shall see, an important bearing on the prognosis. Such cases, as careful clinicians and pathologists have shown, possess certain features, especially in the early stage, which distinguish them from other forms of consumption. My reasons for regarding this case as tubercular in its inception are the following: The youth of the patient, the strong hereditary taint, the insidious advent—not having been preceded by pneumonia, pleurisy or bronchitis and the high range of temperature.

Could we see this young man's lungs we would probably find disseminated through them small semi-transparent granulations. We would find that at the upper part of the right lung these granulations have so aggregated as to form distinct nodules and the nodules by continued aggregation and coalescence have become so extensive as to give rise to the decided change in the percussion note which we have found in this situation. This tubercular deposit by pressing upon the numerous capillaries of the bronchial mucous membrane obstructs some of them, while others in consequence become congested. These congested vessels seated in the mucous tissue of the membrane become ruptured from distension and discharge blood. This I believe to be the modus operandi in the great majority of cases of bronchial hemorrhage in the early stage of phthisis. It is probable that the smaller bronchi in the upper part of the right lung are inflamed and that they, with the pulmonary alveoli are beginning to be filled with an inflammatory product consisting of epithelial cells, fibrin and leucocytes mixed with mucus. The pleura also covering this part of the lung is doubtless inflamed and thickened by a fibrinous exudation and has probably been invaded by the tubercular granulations. It may be that fibroid changes are also beginning in the affected area for we often find all these pathological conditions occurring simultaneously in a phthisical being.

The prognosis in this case is very grave. It is true that we have met the disease early in its career, but when consumption appears with such marked activity in so young a patient with a hereditary history the out-look for recovery or even of considerable improvement, is extremely discouraging. Such cases are usually masked by one course. Perhaps a temporary amelioration of the symptoms, a partial recovery of health and strength, alternated with fresh irruptions of the disease, each period of improvement less perceptible and each irruption more severe, until the downward course becomes uninterrupted and the patient sinks steadily into his grave. Not a pleasant picture to contemplate, but faithful to nature! But these sober facts should not cause us to mitigate a single iota of our endeavors to save our patient. Even in such unpromising cases as this the disease may sometimes be arrested, and in rare instances even a perfect recovery may take place. We can do much to make our patient comfortable and can undoubtedly prolong his life. The general principles of treatment are about the same as those detailed in the preceding case. Nutritious food, a well-ventilated room and a certain amount of out door exercise must be insisted upon from the beginning. The same tonic measures are also indicated. Cod-liver oil would be of doubtful propriety. The patient, as we have seen, is not much emaciated and he has a pretty high temperature. Cod-liver oil as a rule, is not well borne when there is a high range of temperature. The time for that useful agent will come later. But there are in this case certain indications for treatment which did not exist in the preceding one. The cough is hardly prominent enough to demand treatment on its own account, but owing to its tendency to induce hemoptysis it should be held in check. The popular "hydrocyanic mixture" so widely used in the public hospitals of New York will be useful for this purpose. The formula is about this:

℞ Morphia sulphat., - - - gr. $\frac{1}{16}$
Acid. hydrocyan. dil., - gtt. j
Syr. tolutan, - - - - - ʒj.

M. One dose. To be repeated four to six times daiy. (The cyanide of potassium (gr. $\frac{1}{16}$) may be substituted for the hydrocyanic acid if desired). Morphia in small doses is not apt to be attended with evil results, but if it be objectionable a few drops of chlorodyne or an occasional drop or two of wine of antimony will serve to keep the cough in check. Later along when the expectoration becomes profuse we must give stimulating expectorants to enable the patient to get rid of the excessive secretion. If an attack of hemoptysis should supervene he should at once be placed in the recumbent position and kept perfectly quiet. He should swallow small pieces of crackers in every few minutes or an ice-bag may be placed over the chest, care being taken not to allow freezing of the surface to occur. I have found these measures together with the use of this formula invariably successful in the treatment of hemoptysis:

℞ Ext. ergot. fl., - - - - f℥vj
Tinct. opii deodoral., - - f℥ij.

M. Dose, 20 or 25 drops, to be repeated every fifteen minutes until hemoptysis ceases. For the nightsweats he should take every night at bed time one-sixtieth of a grain of atropine in solution or one-thirtieth to one-twentieth of a grain of picrotoxine.

Aromatic sulphuric acid and oxide of zinc are also useful for colliquative sweats. There is no little difference of opinion in regard to the value of local measures in the treatment of phthisis. Of late there seems to be a tendency to discard them altogether among many

practitioners. Pain is very seldom a prominent symptom in phthisis. If it should be severe moderate counter-irritation cautiously applied may be found to promote the comfort of the patient. Vienna paste (equal parts of potassa and lime made into a paste with alcohol) is strongly recommended by no less an authority than M. Jaccound. Whether or not such applications promote the resolution of diseased lung tissue or tend to arrest phthisical processes is quite problematical. It strikes me that a tri-weekly painting of the affected parts with tincture of iodine or a vigorous friction with the liniment of ammonia before retiring, together with careful protection of the surface by means of warm flannels, will accomplish about as much as we can expect of topical measures.

Very little has been determined positively with regard to the value of different resorts for consumptive patients, and such treatment is as yet largely experimental. Physicians in the eastern states usually advise their patients to go to the pine regions of southern Georgia or to Florida at the beginning of winter, returning north again gradually as spring approaches. However it is useless to speak of climatic treatment for dispensary cases. If this young man can afford it I would advise him to exchange the changeable climate and humid atmosphere of the Atlantic seaboard for the high bracing latitude of Colorado.

CORRESPONDENCE.

NEW YORK LETTER.

NEW YORK, October 15, 1885.

Editor Review: A very interesting surgical clinic was recently held at the New York Hospital by Dr. Robert F. Weir, Attending Surgeon. The first operation was that of trephining for epilepsy. The patient, a male forty-eight years of age had suffered some injury to the head when only ten years old, probably a depressed fracture of some kind.. At about the age of twenty epileptic seizures began to occur and continued with recurring frequency till life became a burden. The operation consisted in the removal of a button of bone over the site of the original injury—in the right frontal region at the termination of the frontal sinus. A growth was found on the inner surface of the button, pressing on the brain and sufficiently large to have accounted in the opinion of the operator for the patient's symptoms. Dr. Weir gave statistics showing a percentage mortality in similar operations of nineteen. These figures however included cases operated upon before the introduction of antisepsis. He thought we might expect much better results in the future.

The second operation was that of linear proctotomy. In order to prevent too rapid healing of the sphincter ani muscle Dr. Weir adopted an expedient for which he claimed originality, stating that it had yielded him very good results. He passed a long bistoury up into the ischio-rectal fossa on one side and into the wound thus made introduced a drainage tube. He claimed that this latter procedure acted somewhat on the principle of a seton and that tne healing up of the sphincter was much retarded thereby. The last operation was lumbo-colotomy performed for rectal cancer after the method of Allingham. The case was without peculiar interest.

Papers have recently been presented to the New York Surgical Society by R. J. Hall, M. D., on "Some Contributions to the Etiology of Malignant Tumors" and to the New York Academy of Medicine by Stephen Smith, M. D., on "The Comparative Results of Surgical Treatment in Bellevue Hospital." Dr. A. Jacobi, the President of the Academy, is to give an informal reception to its members the latter part of the month.

Several cases of small-pox have recently occurred in the city, some of which have been directly traced to persons coming from Montreal. The authorities are on the alert and are removing all the patients to the isolation hospitals.

Yet another new hospital is, according to the daily press, projected. It is to be situated in the upper part of the city and to be known as "The Laura Franklin Free Hospital." It is to have a frontage of ninety-five feet and occupy three city lots. The estimated cost is about ninety thousand dollars. The great need here now is the establishment of institutions for the scientific treatment of chronic diseases, as phthisis. We have nothing resembling the "Brompton Home for Consumptives" about which we read so much in the English medical journals.

At the last meeting of the New York Pathological Society the Presiddnt, Dr. Wyeth, presented a patient on whom he had operated two weeks previously. The woman aged seventy had had a growth under the left eye which was removed by some escharotic. It had recently returned and was diagnosed as melano-sarcoma of the skin. The operation for the second removal was quite an extensive plastic one, the incision reaching from the side of the nose to the outer canthus of the eye. On bringing the skin flaps together the tension was so great as to cause blanching and it was necessary to cut some of the sutures which had been inserted. Union by first intention resulted throughout the wound. Microscopical examination of the neoplasm confirmed the diag-

nosis. Dr. H. J. Boldt presented a specimen of a cast or exfoliaied mucous membrane of the bladder. The patient was a primipara aged eighteen, who a few days after delivery began to have colicky pains over the hypogastrium. The urine showed pus, blood and renal casts. There was some little fever and a diagnosis was made of acute catarrhal nephritis. The bladder was washed out with carbolized water and catheterized. Some days later the patient felt a "lump" in the urethra. Examination revealed a bulging mass at the meatus, looking like an area of inverted bladder. It was easily reduced and the bladder washing continued. Finally the specimen presented was passed. The temperature had been rising during the entire period though temporarily controlled by the local treatment; finally cerebral symptoms resembling those of septicemia were developed and the case resulted fatally. No autopsy was obtainable.

Dr. Elizabeth Cushier presented a specimen of abdominal tumor removed at autopsy from the body of a woman aged forty-nlne. The history was of six months duration. An exploratory incision was made and such extensive adhesions were found that removal was an impossibility. The woman refused to take nourishment and died a few days after the operation. The wound was found to have united throughout. The microscopical examination showed the tumor to be a spindle-celled and round-celled sarcoma. Similar cells were found in the body of the uterus. The tumor was thought to have sprung from the ovary. Dr. Cushier also showed a dermoid cyst of the ovary which had the usual contents of hair and teeth.

Dr. L. E. Holt showed the heart, lungs and kidney of a child who had died forty-eight hours after birth. There was a distinct syphilitic family history and the child born some two or three weeks before full term was cyanotic from birth. The respiration was very rapid and the pulse imperceptible. It died quietly. On post-mortem a large patent foramen ovale was found with somewhat thickened ventricular walls but no lesions of the aortic or mitral valves. The kidney showed uric acid infarctions. The lungs did not crepitate, were hard and sank in water. In fact, it was hardly to understand how the child could have breathed at all. Dr. Holt thought there might be some connection between the condition found and the specific family history.

J. E. N.

—Prof. Richard McSherry, of Baltimore, died October 7th, in the 68th year, of pulmonary consumption.

ITEMS.

—The Medical Press of Western New York is the latest medical publication. It is a monthly, published in Buffalo, and edited by Dr. Roswell Park, assisted by M. D. Mann, of Buffalo, Ely Van De Warker, of Syracuse, and W. J. Herriman, of Rochester.

We are much pleased with the contents of the first uumber.

Its editorial pages are marked by a grace and fluency of diction that are pleasing. An earnest scientific endeavor appears to actuate the new venture. We hope that it may become a marked success as a scientific journal, and that its reception will be such that its scope of usefulness may be rapidly extended.

—A noted English physician has revived the lie that fish is valuable as a brain food. He knows no more about it than Mark Twain, who gave the following advice to a young author: "Yes, fish makes brain. Judging from your previous articles, you need a couple of whales—not the largest, but good, middling-sized whales." Once let the belief become general that fish makes brain. and the demand for fish will be so great that before long the fish would become an extinct animal, and then what would we do for a vacation? No, it's a great mistake. Neither fish nor any other food can supply the great natural deficiency of cerebral tissue which aflicts the modern man.—(Medical Age.)

—The Ninth Annual meeting of the American Academy of Medicine takes place on Wednesday and Tuesday, October 28th and 29th, at the New York Academy of Medicine, No. 12 West 31st street, New York. A large and interesting programme has been provided.

—The patient's gratitude to his doctor is part of his disease. It is most declared when the fever is highest, cools off during convalescence, and entirely disappears with the complete return of health. The physician who is in the habit of letting his bills run till the end of the year is furnished with frequent illustrations of this fact.—N. E. Monthly.

—At a meeting of the Paris Hospital Medical Society, called expressly to consider the admission of women as internes of the Paris Hospitals, the meeting was addressed by Professor Verneuil in favor of the ladies, and after a brilliant reply by Professor Trelat the vote was almost unanimous against the project, there being only four in its favor.

THE WEEKLY MEDICAL REVIEW.

MEDICINE AND SURGERY.

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THE EXCRETION OF URINE IN ITS RELATIONS TO ABDOMINAL SURGERY.

In the Annales des Mal. des Org. Génito-urinaires, May 1885, Thiriar says that if the chlorides in the urine after laparotomy sink below one grm. in twenty-four hours, (twelve grms. being the normal amount), that we must look out for septic peritonitis. As long as a higher excretion than one grm. is maintained no serious apprehensions need be entertained, even should the patient have fever, emesis, etc.

We are inclined to doubt the exactness of this statement and think it will be more correct to become apprehensive when symptoms of peritonitis develop, even should the lowest figure of chlorides-elimination not obtain.

In the establishment of the diagnosis of doubtful abdominal tumors Thiriar lays great stress on the excretion of urea. He says that in cases of malignant tumor the amount of urea per diem sinks below twelve grms. The normal amount is thirty-two grms. Thiriar considers this test so reliable that he trusts to it even in the determination of malignant or benign stricture of the pylorus.

CAFFEINE IN CARDIAC DISEASE.

O. Seiffert of Wuerzburg reports on the employment of caffeine in seven cases of valvular lesion of the heart. He made use of the citrate of caffeine, preferring it to the double salts of Tanret. The citrate was given in broken doses of one to two grms. per diem. For instance he would order:

℞ Caffein. citric., - - - 1.5 grm.
Aq. destil., - - - 150.0 grm.
F. sol. S. One tablespoonful every two hours.

Seiffert's results are confirmatory of those shown by Riegel which we have formerly given our readers.

Caffeine is to be regarded as a regulatory and diuretic drug similar to digitalis. It is superior to digitalis in that its action is more rapid and in that there is no cumulative result. The heart action is slowed and rendered more forcible and diuresis becomes established at once. The caffeine is rapidly eliminated by the kidneys. Its action for this reason is not so permanent as that of digitalis. In two of Seiffert's cases the restored compensation remained so for a reasonable period.

The general condition of the patients is usually a good one. Palpitation and asthmatic trouble mend and insomnia usually gives way to quiet slumber. In cases, however, the caffeine is not well borne; insomnia persists and nausea and dizziness ensue.

ON THE ASSOCIATION OF OPHTHALMIA NEONATORUM WITH JOINT-DISEASE.

R. Clement Lucas drew attention in the British Medical Journal of July 11, 1885, to a form of gonorrheal rheumatism occurring in infants as the result of purulent ophthalmia, and there related two cases, one of which must be accepted as bearing no other possible explanation.

He now writes:

"By a remarkable coincidence—unless these cases prove to be uncommon—I am in a position to relate another case which was brought among my out-patients for the first time on July 16. It may be that the case is not absolutely free from the suspicion of syphilis, but the joint disease, I have little doubt, has a definite relation to the ophthalmia. A. M.

C., aged 26, gives the following history: She was married four years ago last October. Her first child was born at the seventh month, on the last day of the following July. It suffered neither from rash nor snuffles, and lived to the age of seven months, then died of whooping-cough. Between this child and the next she had an early miscarriage, about the second month. The second child was born on March 9, 1883, at full time and healthy. It suffered from neither snuffles nor rash, and lived to the age of a year and six months, when it died of measles. The third child was born on June 20, 1885. The child's eyes were clear at birth, but two days later they began to discharge. The mother was given a lotion, which she thought too strong, and she has therefore bathed the eyes with warm water only, about every half hour since. A fortnight after birth the child's left knee became swollen and painful, and it cried when the knee was moved or touched. About the same time a red rash appeared over the buttocks, which the mother attributed to the use of soda in washing the diapers. The diapers are made of coarse toweling. The eruption is a bright red vesicular eczema, confined to the region irritated by the excretions. There are no coppery shiny spots such as are characteristic of syphilis. The hands, face, and mouth are free from eruption, and the child has had no snuffling at the nose. The mother suffered from a yellow discharge from the vagina for about two months before the birth of the child. She has never suffered from any eruption or sore throat. The child was seen on the first visit by the house-surgeon, who prescribed a lotion of borax for the eyes and a grain of mercury and chalk every other night. When seen by me on July 23, the eyes were much better, but still purulent, and the rash was red and vesicular as described. The left knee-joint was semiflexed, swollen and distended with fluid, but not red on the surface. There was an apparent enlargement of either epiphypsis, entering into the formation of the joint. The lotion was continued, but the grey powder was stopped, as likely to confuse the diagnosis.

In my communication referred to I ventured to suggest that, though the cases I there related were of the acute arthritis variety, it was not improbable that there was a subacute variety corresponding to the subacute gonorrheal rheumatism of young adults, which would be met with when attention was drawn to this affection. The foregoing case appears to bear out the truth of my prophecy, for the knee-joint is swollen simply by effusion into its interior and there is no surface redness."

Injection of a New Preparation of Albuminate of Mercury in Syphilis.

We find in the British Medical Journal that Dr. Max Bockhardt, of Wiesbaden, describes in a German dermatological journal an ingenious method of administering mercury in syphilitic cases by subcutaneous injection, which, he says, is perfectly innocuous, never having caused pain, induration or abscess. He combines the mercury with blood-serum. 'The latter, which may be obtained from the horse, sheep, or ox, is sterilised according to Koch's process, and then filtered. Of the filtrate, 40 cubic centimètres is poured into a graduated glass. To this is added a warm (50° cent.) solution of 3 grams of bichloride of mercury, in 30 grams of water. The resulting precipitate is dissolved in a solution of 7 grams of common salt in 20 grams of water. This gives a 3 per cent solution of mercury blood-serum. This is then mixed with distilled water, so that the whole weighs 200 grams, which reduces the strength to 1½ per cent, which is the best strength for use; a gram of it containing 0.015 gram of mercucurial albuminate. This solution is a yellowish opalescent liquid, with neutral reaction, and will keep very well in a dark glass bottle in a cool place. The injections are given once or twice a day, 0.7 gram being introduced on each occasion, containing about 0.01 gram or three-twentieths of a grain of albuminate of mercury. Besides acting rapidly and powerfully on syphilis, and keeping the system for a long period free from secondary

symptoms, this preparation has the advantage of being stable, cheap and easily prepared.'

Treatment of the Convulsive Cough of Children.—The New York Record quotes the Therapeutic Gazette:

"The remedies directed against the convulsive cough of children may be divided into 1, narcotics; 2, antizymotics; 3, purely empirical agents. 1. (*a*) Bromide of potassium has not verified its alleged value at the polyclinic of Berlin; one hundred and twenty-two cases came under observation, twenty-six were treated with this salt alone; six of these only improved under its use, while the duration of the malady was in no way shortened. (*b*) Belladonna is one of the oldest remedies used in this affection; three to four drops of an atropine solution of five per cent are recommendable. Fifteen grains of the extract may be given after supper, and this dose increased every five hours, until one hundred grains have been ingested altogether. This remedy owes its great reputation to its power of modifying the course and intensity of the paroxysm, and of shortening the convulsive stage. (*c*) Opium has no specific virtues in this affection, and ought not to be administered. (*d*) Hydrate of chloral is employed by Lorey twice daily in doses up to fifteen grains, with gratifying results. (*e*) Lublinski (the well-known therapeutist of Berlin) combines the extract of belladonna and hydrate of chloral with very encouraging results. The butylate of chloral requires further clinical trials to give us a correct estimate of its therapeutical utility. (*g*) The same can be said of propylamine. (*h*) Atomized ether applied to the neck, with the view of influencing the trunk and branches of the pneumogastric nerve, is a remedy of doubtful effect. (*i*) Nitrite of amyl is inadmissible. J. Roubart recommends the continuous current to the medulla oblongata, especially in small children. 2. (*a*) Quinine, in the state of either the sulphate of the hydrochlorate, is recommended by many physicians. (*b*) Other practitioners praise phenic acid, given either by inhalations or internally, but there is little definitely known of the value of this drug. (*c*) Inhalations of oil of turpentine have repeatedly gived good results. (*d*) Inhalations of petroleum are recommended by Lesser and Hildebrandt, though others doubt their value. (*e*) Salicylic acid and salicylate of sodium have given various results with different physicians, and do not hence appear to be reliable. (*f*) Porrot eulogizes the vapors of phenylate of soda in the sick-chamber. (*g*) Nothing positive is known of the corrosive sublimate in this affection. 3. (*a*) The extract of chestnuts, prepared from leaves gathered in the fall, is not a specific, but appears advantageous. (*b*) Oxalate of cerium, in a daily dose of forty-five grains for a child one year old, and of four drams for a child of seven years, is well indicated and advantageously used. (*c*) Hydrochlorate of pilocarpine is more of an abortive than a specific, but is to be used in small doses. Cassel mentions still ammonium, calomel, the mercurial inunctions, and tincture of myrrh, but none of these drugs can claim constancy and promptness of action."

The Treatment of Cephalocele and Spina Bifida.—The Practitioner quotes the Medical Times as follows:

"A paper in the Berliner Klinische Wochenschrift, 28, 1885, by Prof. Schatz, of Rostock, on the respective advantages of expectant and operative treatment of cephalocele and spina bifida, is one of some interest when considered in relation with the report lately presented to the Clinical Society by its Spina Bifida Committee. Taking as his text the expressed opinions of Heinecke and Steffen, both of whom speak in gloomy terms of the prospects of success after any radical operation, he presents a list of cases of encephalocele to illustrate the relative prognosis with and without operative interference. Of 105 cases, fifty-nine were occipital and forty-six frontal in position. Of the former, twenty-four were left untreated, and only three recovered, thirty-five were operated upon by incision, injection of iodine or ligature, with six recoveries. Of the frontal encephaloceles,

six out of thirty-two survived without treatment, and only three out of fourteen cases after operation. A few cases of spina bifida, quoted from Lorinser, show much the same proportion of success, and, in the opinion of that author, justify the view that no operative interference should be attempted when it can be clearly shown that a communication exists between the sac and the vertebral canal. Professor Schatz himself considers that operation is only justified when there is no such communication, and when the tumor is covered with healthy skin, is fully translucent and not painful. In other cases, however, he would endeavor to secure the isolation of the tumor from the arachnoid cavity by means of graduated constriction or pressure calculated to set up a process of plastic adhesion, when applied to the base or pedicle, if there be one, of the tumor. He relates the particulars of three cases in which he operated by emptying and removing the sac, the base or pedicle of which was firmly secured by means of a long clamp, such as is at times used to secure the stump of an ovarian tumor. His first case was one of spina bifida, and was not successful in saving the life of the child. In the second a large encephalocele was successively emptied and removed with but little disturbance of the child's health, life being prolonged to the eleventh year. The symptoms and physical signs of internal hydrocephalus were, however, always present, and gradually increased, the child remaining paralyzed in the lower limbs and of very feeble intelligence. In the third case, a series of encephalic protrusions were in like manner clamped and removed, and, notwithstanding the great extent of the hernia, the case, after some suppuration and many fluctuations of temperature, ultimately recovered and is still living, although with a steadily increasing hydrocephalus. All these cases were in themselves severe, and hence the merits of the operation must be considered apart from them; it is possible, however, that the method of compression by clamps, when applied to the more simple cases of the kind, may be found to enhance the chances of success to a very considerable degree.

Bihydrobromate of Quinia.—The Medical and Surgical Reporter writes regarding this salt: "This remedy, which has only recently become known, contains 60 per cent. of pure quinine and about 30 per cent. of bromine. It is still easier soluble in water than the hydrobromate. The property of all chemical unions of bromine with quinine, to become easily absorbed, to have no disagreeable side-effects, and to act as sedatives besides the specific effect of the quinine, have induced mainly French authors to prefer the bromine salts of quinine to all other salts of the latter drug. Paccoud, for instance, uses only this preparation in typhoid fever, and he believes he obtains a greater freedom from nervous symptoms in cases thus treated than is found under any other therapeutical procedure.

Dr. J. Maximowitsch (Deutsche Med. Zeit. 64, 1885, p. 727,) has also investigated the action of this quinine preparation, and he administers it in all cases where quinine is indicated and a special sedative effect is besides desirable. He says that the hydrobromate of quinine presents yellowish-white minute crystals, which are easily soluble in water. The solution of it has an acid reaction, and assumes within a few days a greenish tint, without the latter fact having any deteriorating effect on the remedy. Its easy solubility makes this preparation specially adapted to hypodermic medication. M. employed a solution of 0.18 to 0.3 to 1.0 aq. dest. ($2\frac{1}{2}$-5 grains in 16 minims of water). To obtain the solution as rapidly as possible, it ought to be heated and filtered. Internally the remedy is used in about the same doses, and best administered in wafers."

Death after the Use of Antipyrine.—The Cincinnati Lancet and Clinic quotes the following case from the London Lancet: "This remedy is one which may as a rule be administered without giving rise to unpleasant symptoms, although vomiting and an exanthematous rash may follow its use; collapse, in one or two cases, and a single death have followed its administration. An outline

of what is given of the fatal case in the Lancet is as follows:

"A woman of thirty-five who had miscarried in the fifth month. She had suffered soon after her miscarriage from pain in the lower part of the abdomen, vomiting, headache, and shivering, and later on from diarrhea. She became progressively weaker, but never lost consciousness. She was kept on milk diet and the vagina was syringed.

She was sent to the hospital as a case of enteric fever. She was admitted to the hospital in a very weak state, six weeks after her miscarriage.

In the hospital the case was thought to be of a puerperal nature.

She was admitted on January 15, was given five grains quinine three times a day. On the 17th the temperature was 103.6°, pulse 132, respiration 36.

On the 17th, at three o'clock in the afternoon, the quinine having been discontinned, she was given thirty-five grains of antipyrine, followed three hours later by seventeen and one-half grains.

The temperature at three o'clock was 103°, pulse 132 and very feeble.

At six o'clock the temperature was 98.4°, pulse 108, skin cool and moist. At eleven in the evening she answered questions intelligently and made her wants known; her condition was much the same as at six o'clock; temperature 98°.

On the 18th, after a restless night, with some diarrhea and vomiting, the temperature wss 98°, pulse 120. The patient much collapsed.

Stimulants were given, but the patient died at 11 P. M., thirty-two hours after taking the antipyrine.

The following is the result of an examination the day after death:

'Brain and its membranes much congested, the superficial veins being especially dilated, with a few hemorrhages. Pericardium normal, heart free from valvular disease, but somewhat softened; a few old adhesions of the pleuræ, but no excess of fluid. Lungs much congested, but otherwise normal. No peritonitis. Liver normal. Spleen much enlarged, weighing three pounds, and softened. Its middle third was occupied by a large infarct, broken down into a cavity in the centre. Kidneys also enlarged, and each contained two or three conical infarcts. Intestines intact in their whole length. Uterus contracted and empty.'

In view of the very weak state of the patient and other conditions of the case given above, it does not seem necessary to fear antipyrine as in any sense a dangerous drug. It has now been used in hundreds of cases with only one fatal result; on the other hand, it is imperative that every fatal or unfavorable case of a recent remedy should be widely known in order that the profession may be aware of all possible risks when they are using a new substance."

Ulceration of the Bowels in Young Infants.—The Louisville Medical News quotes the Practitioner:

"It cannot, I think, be questioned that a speedier and more accurate information as regards the effect of remedies, may often be gained from the study of chronic than of acute disease, inasmuch as the same symptoms are apt to recur again and again, and the same remedies can be put to oft-repeated tests. The following case, which I have ventured to report, has given me an amount of information it might otherwise have taken years to obtain, and possibly it may prove of service to others. According to the mother's statement the child in question had been given up by more than one physician, and I must say myself it was one of the worst cases I have ever seen recover. The little one was two years and eight months old, a perfect skeleton and quite unable to sit up. She had a sallow, waxy appearance, without a particle of color about her face except a slight hectic flush on her cheeks. Was sick whenever she took food, which consisted entirely of milk and lime-water. Bowels moved about every four hours and the smell was perfectly unbearable. The stools consisted almost entirely of slime and pus, streaked with

blood, and adhering to the bottom of the chamber vessel even when it was held upside down. The stomach was slightly distended and tender. The previous history was as follows: She was always rather sick from birth, but was worse after she was one year old. Had an attack of diarrhea at eight months, and urine was discolored (so the nurse says) with blood. She has always been troubled with diarrhea on and off since. The stools were at first very large in quantity and semi-solid but not slimy. When the diarrhea was at its worst, the actions occurred about every two hours. The stomach was always more or less tender and distended. At twelve months old she had pains in the joints, and one knee had to be put up in a splint; both legs were much swollen. The father had had syphilis before his marriage, but was said to be perfectly well when this took place. The child was nursed for about four months, but occasionally had a bottle of Swiss milk. The indications for treatment appeared to me to give a light and easy digestible food, moreover one which after digestion would leave as little waste material as possible, to soothe the irritation of the bowels, and to improve the condition of the blood. I ordered two tablespoonfuls of whey, and one tablespoonful of cream to be taken at each feeding, and in the course of twenty-four hours I found she managed to dispose of one-half a pint of barley-water, one-half a pint of whey, one-fourth of a pint of cream, together with, later on, one and one-half ounces of milk. She also took in twenty-four hours the white of four eggs beaten up in water, four teaspoonfuls of Brand's liquid essence of beef, and two ounces of finely-minced raw meat. I ordered the body to be thoroughly oiled night and morning, the loins and stomach to be kept warm with a flannel bandage, and the feet to be well wrapped up. In order to alter the character and frequency of the secretions, I gave three times daily a mixture consisting of the following: one minim solution of potash; eight minims castor oil; three-fourths of a minim tincture opium; twenty minims syrup ginger, and one-half a dram mucilage. Then when the pus and slime began to pass away and the bowels appeared simply relaxed, I gave two grains bicarbonate soda; three grains subcarbonate bismuth; one-half a minim tincture opium; five minims tincture catechu; two minims tincture rhubarb; five minims compound tincture cardamoms with a little syrup and mucilage every four hours. Next, in order to improve the condition of the blood, as soon as the secretions began to improve, I ordered ten minims of the concentrated syrup of the lactophosphate of phosphate of lime and iron to be given in water three times daily. The child was ordered from the start to get plenty of fresh air, provided it was dry, and the rooms in which the child lived and slept were requested to be kept dry, and at the same time thoroughly clean and ventilated. In the course of about one and a half years the child under this treatment made a good recovery, and was able to run about by herself and eat the same as any other child. The vomiting ceased almost entirely from the time that the milk was given up. Whenever the secretions became purulent and slimy the castor oil and laudanum mixture was resorted to, and the carminative and astringent one when the bowels were simply a little relaxed. The castor oil and laudanum were successful in altering the character of the secretions, not simply once or twice, but on several occasions, and I have applied it since in other cases with uniform success. As regards the lactophosphates, I can not speak too highly of them in aiding the subsequent recovery. As Dr. Dusart states, they act as general excitants of all the nutritive functions, insure digestion, bring back or increase the appetite, and generally improve the vital energies."

A New Method of Giving a Bath in Typhoid Fever.—Dr. H. C. Wood writes in the Therapeutic Gazette (Polyclinic):

"As is well known, the great difficulty in the use of the bath in fevers is the trouble which is involved in moving the patient in and out of the bath tub. The following simple device will in great part remedy this

trouble, and also save the necessity of providing a portable bath tub. The canvas of an ordinary bed cot is to be made two or three inches wider than it is ordinarily arranged, and a board nailed to each end so as to hold the cot permanently open and project above it several inches in the form of a head-board. or foot-board. This cot is then arranged alongside of the bed of the patient, so as to be on a level with the bed, and at the same time firm. Over it is spread an india-rubber cloth sufficiently large to cover it entirely and to fall above and below, over the head-board and footboard. The patient, wrapped in a sheet, is then slipped on to the cot; of course, the canvas sags down, and when water is poured over the sheet the man lies half immersed in a pool. If the attendant is provided with two tubs, one containing water and one empty, and also with a large bathing sponge, the water in this pool, heated by the body, can be removed by means of the sponge, and fresh cool water soused over the body enveloped in the sheet. In this way the water—lying continually between the sheet and the body, as well as saturating the sheet, so envelopes the person that the effect of a cold bath can be achieved, and I have seen very rapid reduction of obstinate high temperatures. If the bed upon which the patient lies be a very wide one, instead of a cot being used, the mattress can be so arranged on one side as to sag down sufficiently to form a hollow for the pool, and in this way the bath be given.

I notice that Stephan, of St. Petersbug, affirms that the application of ice-bags over the super-clavicular region is sufficient to control the temperature in fever, owing to the fact that the cold is brought into close contact with much of the blood of the body by the large superficial veins of the neck. I have had no experience, however, of this method of reducing temperature, but it is worthy of a trial; especially as it seems to be safer to reduce temperature in a low fever by external cold, than by our present known depressant antipyretic drugs."

A New Method for the Restoration of Cessation of Respiration Under Chloroform.—Dr. R. Milne Murray thus writes in the Edinburgh Med. Jour., (Medical and Surgical Report):

This process, which I may term "perflation," I carry out in the following way: Disconnecting the rubber tubing I take the end of the T tube attached to the tracheal cannula in my mouth, and closing the branch with the finger, I make one or two aspirations of the lungs, compressing the chest gently at the same time. This removes a considerable quantity of vapor from the upper passages. Then opening the branch, I make a series of deep inspirations. The air rushes in by the branch, and no doubt the greater part passes into the mouth; yet some of it enters the lungs, and a current is thus established by which a very large quantity of the chloroform is rapidly expelled, as can be proved by the taste of the air coming through the tube. After two or three such inspirations the taste of the vapor becomes fainter, and as soon as this is noticed, I reverse the process, now blowing air into the tube, with force just sufficient to cause the chest-wall to move in the slightest possible degree, the branch tube being open all the time. Generally, after one or two such perflations, the heart shows signs of vigorous action, and shortly thereafter breathing commences and continues in a perfectly natural manuer. Should it not return so rapidly, and after I am assured by the absence of taste or smell in the expired air that the chloroform has been almost entirely removed, then I close the branch tube and commence gentle inflation of the lung in the ordinary way.

By such a method I have resuscitated animals as often as ten times after cessation of respiration, and in these I have little or no indication of the production of the pink froth to which I referred.

Of course, in order to accomplish resuscitation so frequently as eight or ten times, it is necessary in the later stages to lose no time between cessation of movement and commencement of the effort; but the mere fact

that it can be effected under any conditions so frequently, speaks strongly, I think, for the efficacy of the method. In the earlier resuscitations we may safely wait thirty to sixty seconds before beginning the attempt, provided the animal has not been for a long period under the influence of the vapor. The time occupied in the operation is much less when we begin before the heart has ceased to beat, but I have repeatedly waited until all indications of the heart's action had ceased, both as indicated by the apex beat and the pulsation in the carotid. But in such cases it has been an invariable experience that the heart resumed beating a considerable time before breathing commenced.

Speaking broadly, as regards the difficulty of resuscitation as indicated by the time required to effect it, I have observed that the time required to restore respiration varies inversely as the concentration of the dose, and directly as the time required to stop respiration. That is to say, the more concentrated the dose the easier was the reanimation, and the longer respiration continued under the action of the vapor the more difficult was the reanimation.

The Nux Vomica Treatment of Delirium Tremens.—The Medical Bulletin writes:

"The differentiation between the delirium of acute and chronic alcoholism is easily made. The former is the condition commonly known as mania-a-potu, and is practically a form of acute cerebral hyperemia. It is due to the direct action of alcohol upon the brain and vascular system of a person who has not become habituated to the use of intoxicating liquors. It is usually observed in young subjects of a nervous temperament who have been drinking heavily for a few days, after a prolonged period of abstinence. In some who are especially susceptible it may supervene after a debauch of only a few hours' duration. It is characterized by a flushed face, injected conjunctivæ, bounding pulse, and throbbing carotids. The delirium is more violent than in the chronic form, and the patient can with difficulty be restrained from inflicting injury upon those around him.

The treatment consists in removing the cause and diminishing the cerebral hyperemia. No more alcohol must be allowed in any shape or form. Opium is also contraindicated, but the bromide of sodium or potassium in half-dram doses every hour may be relied upon as an invaluable sedative. In addition, the cold douche or an ice-bag should be applied to the head, and a double seidlitz powder given every hour until the bowels have been freely moved. If the stomach be full, an emetic of ipecacuanha or apomorphia should precede all other medication.

Chronic alcoholic delirium, or delirium tremens is only found in old drunkards after an unusually long debauch, or in a debauch of ordinary length, but during which the stomach has become so disordered that little or no food can be retained or assimilated. In some cases the patient loses all desire for drink as well as for food, and when the delirium is developed in a day or two, his friends ascribe it to the sudden stoppage of the alcohol. This is an error, however. The delirium in all cases of chronic alcoholism is symptomatic of exhaustion, it is true, but it is also symptomatic of the disturbing influence of the alcoholic poison upon the cerebral gray matter, and neither normal digestion nor rational cerebration can be re-established until the greater portion of the alcohol in the system has been eliminated, or its action neutralized by appropriate remedies.

The cerebral congestion which is present in these cases is passive in character. The pulse is rapid but feeble, the tongue is often heavily coated, the hands and feet are cold, and the face becomes pale and anxious. All the symptoms are those of depression, and the patient, instead of endeavoring to injure those around him, implores them to protect him from the objects by which he imagines he is surrounded.

At one time all cases of delirium tremens were treated by large doses of opium or chloral, under the mistaken idea that the delirium was due to over-excitation, and that sleep was the desideratum which must be secured. Under this treatment sleep was often obtained,

but in many cases it was the sleep from which there was no waking. It is now known that the delirium is due to exhaustion, and that if the patient's strength can be restored by suitable aliment, natural sleep will follow as soon as the alcohol is eliminated from the system. Consequently hot coffee and beef tea occupy a prominent place in all the plans of treatment now in vogue. Medicinally, chloral and the bromides are the agents most frequently employed, and they undoubtedly are beneficial.

Quicker and better results, however, can be obtained from the administration of nux vomica or its alkaloid, strychnia. The value of either of these in overcoming the gastric disturbance and nervous prostration which remain after the delirium subsides has long been known, but their still greater value in preventing or aborting the delirium is not sufficiently appreciated. Our attention was first drawn to their efficiency in this respect by an article written in 1875 by Dr. H. C. Morey, in the Pacific Medical Journal, in which he related the case of a drunkard, who, after a protracted debauch, was accustomed to sober himself up by taking several grains of strychnia at one dose.

Since then we have given nux vomica in a number of cases of chronic alcoholism, in which delirium was either present or impending, and with uniformly gratifying results. The treatment in each case was begun by the administration of a bottle of citrate of magnesia. If this was rejected by the stomach another was given in a few minutes. The patient was then directed to take a small cup of coffee or beef-tea every hour, and also ten drops of the tincture of nux vomica every hour for six hours. At the end of that time the delirium was either much diminished or completely relieved, the nervousness and trembling no longer existed, and the patient was able to sit up and talk in a rational manner. The dose of nux vomica was then lessened to five drops every two or three hours, but no effort was made to procure sleep for twenty-four hours. Then, if there were no cardiac counter-indications, a quarter of a grain of morphia was given, and repeated in an hour if necessary. In cases complicated by valvular disease, or probable atheroma, sleep can be safely obtained by the administration every two hours of thirty grains of bromide of sodium and fifteen drops of the tincture of digitalis.

The essential part of the treatment, however, and to which we especially desire to call attention, is the employment of nux vomica early in the case as a direct physiological antidote to the alcohol. Its value is due to the fact that it is an excito-motor, while alcohol is a motor depressant. Larger doses than those mentioned may be given, if required. In a case recently reported by M. Lardier in the Journal de Médecine, the patient, after taking small amounts of strychnia without effect, rapily improved when given twelve grains in one day. This heroic dose will, however, rarely be found necessary."

The Results of Combined Splenectomy and Thyroidectomy in Dogs and Rabbits.—G. B. Ughetti and E. Di Mattei (Arch. Soc. Med. Bizzozero, Medical News) find, from experimental removal of both spleen and thyroid body in dogs and rabbits, that

1. Total thyroidectomy causes the death of animals in from four to fifteen days after the operation, with the same phenomena already observed by others.

2. Splenothyroidectomy done at a single operation produces death in dogs in from four to sixteen days after the operation, with occurrence of the same symptoms observed after total thyroidectomy alone.

3. By thyroidectomy and consecutive splenectomy, at different times and with an interval of from five to nine days, the dogs succumb as before but, suffer much more if chloroformed for the consecutive splenectomy.

4. Dogs in normal condition are not affected by transfusion of blood from dogs upon which thyroidectomy has been practiced, whether made through the peritoneum, the veins or directly from the carotid artery into the jugular vein.

5. Dogs from which the thyroid has been

removed when subjected to transfusion, even though from dogs upon which thyroidectomy has been performed, live longer than when transfusion is not practied.

6. Of five dogs in which a single lobe of the thyroid was removed, one died after four days, a second after six days, and no effect whatever was observed in the remainder.

7. Isolation of the two lobes of the thyroid body, is followed by neither local nor general disturbance.

8. Total thyroidectomy in the rabbit is not followed by any disturbance or death.

9. Rabbits survive splenothyroidectomy done at a single operation.

One female thus operated upon became pregnant and brought forth at term healthy offspring with both organs present.

CONTRIBUTION.

A SUCCESSFUL CASE OF IDEAL CHOLECYSTOTOMY, WITH CRITICAL REMARKS ON THE PATHOLOGY AND THE DIFFERENT OPERATIVE PROCEDURES PRACTICED ON THE SYSTEM OF GALL VESSELS.

WITH SEVEN ILLUSTRATIONS.

BY AUGUSTUS C. BERNAYS, A. M., M. D., HDLBG., M.R.C.S., ENGLAND.

Professor of Anatomy, St. Louis College of Physicians and Surgeons.

Read before the Mississippi Valley Medical Association.

Mrs. C. O. sent for me on October 9, 1884, to consult with her physician in regard to an abdominal tumor which had confined her to her bed for the past three weeks and had given rise to the most excruciating pain. The patient gave an excellent family history as to longevity and as to the absence of any constitutional debility. She is 46 years of age, married at 18, has given birth to thirteen children, seven of whom are living. Menstruation has always been regular;besides the usual diseases of childhood, has never been ill up to 1878. She states that her troubles began by a feeling of heaviness in the right hypochondriac region, accompanied by a very decided feeling of nausea. Since then she says she has never been quite well, not even for a single day. She soon began to have attacks of colic every month, which lasted for from one to six days. These attacks grew more frequent and gradually, during the last year, grew much worse, so that the patient was confined to her bed for weeks or even a month at a time. Gall stones were never suspected, there never was any jaundice and the general appearance of the patient had been good up to the last half year. Decided symptoms of cachexia, corresponding to very considerable loss in weight, had only been noticed recently by her relations and her physician, Dr. Drechsler, of St. Louis, Mo.

Three years ago, patient noticed a small hard lump in the region of the gall bladder, but after showing it to her physician paid no more attention to it and thinks that it may have disappeared for a time. She has noticed a continual enlargement of the tumor only during the past six months.

On making a thorough examination of the patient, all her organs were found normal. The urine also normal in color and constituents. In the middle of the hypochondrium under the linea alba,midway between the umbilicus and the ensiform process, I found a tumor the size of a goose egg, perfectly smooth, very hard and very freely movable under the abdominal parietes, which were thin and devoid of fat. The tumor was equally movable in all directions from a point about two inches to the right of the linea alba and about one and a half inches below the edge of the ribs. The attending physician was much inclined to believe in a malignant tumor of the colon or small intestine. I thought of a floating kidney, an omental or a mesenteric tumor. I also considered among the possibilities we might find a diverticulum at the juncture of ileum and jejunum, which is often found and is known to be a rudiment of the omphalo mesenteric duct, that might be the seat of disease or of a koprostasis. The very hard appearance of the tumor and the absence of fluctuation placed the diagnosis of gall stones among the most remote probabilities. An examination made with the assistance of a number of colleagues, the next day, left the diagnosis as uncertain as before. I then proposed explorative laparotomy, which was readily consented to.

On the morning of October 12, with the assistance of Drs. Bernays, Sr., L. Bauer, C. Barck, H. Wichmann, Kleinecke, Thornton and others, I performed laparotomy in the linea alba, beginning an inch below the xyphoid process and extending to the umbilicus. After introducing my hand, I rolled an

elliptical smooth tumor into the incision, and by following the tumor to its place of attachment, I at once recognized it to be the immensely enlarged gall bladder. The tumor measured seven inches in length and nearly three inches in diameter; it was so filled with fluid that it gave the impression of being semi-solid even now, and I could feel no gall stones in the sac. Passing my hand along the tumor to the hilus of the liver, I distinctly felt a hard substance the size of a large filbert, in the cystic duct. It was very evident now that this was a calculus which had become impacted in the duct and had caused obstruction with consecutive distension of the gall bladder. After having rolled the bladder as far as possible out of the abdomen, I pushed a troicart into the sac and emptied over a pint of perfectly clear, thick mucus into a vessel; only the last ounce or two that was emptied had a greenish deposit. After this procedure the sac became flaccid, and its walls having contracted, were as thick as a normal duodenum. A number of gall stones of different sizes were then felt loose in the sac, the one in the duct being firm and not movable in either direction. Next, I introduced a narrow-bladed knife into the troicart opening and made an incision one inch and a quarter in length, over the cupola of the sac, the latter being firmly held by a vulsellum, entirely without the abdominal cavity. I then emptied twenty stones of different sizes on a clean towel, which I had placed under and around the sac. Some were facetted in the shape of triangular pyramids, others were round. They were the common cholestearin stones, of a greenish brown color. I now introduced the index finger of my right hand into the sac and felt a round stone almost entirely covered by mucous membrane fastened in the beginning of the cystic duct. It seemed to have become engaged in the first convolution of the so-called valve (Valvula Heisteri) of the duct (Fig. I). The naked surface of the stone, which I could feel, was no larger than one-fourth of an inch square. I passed my left hand along the outside of the sac and by manipulation attempted to dislodge the stone. About fifteen minutes were wasted in this vain endeavor. I then introduced a probe-pointed knife into the sac in place of my right index finger, under guidance of the left hand upon the outside of the sac, carefully cut some of the tissues which constricted or rather surrounded the calculus. After making three or four nicks into the tissues, which consumed about fifteen minutes more, because the valve was so tightly adherent to the calculus, that it was

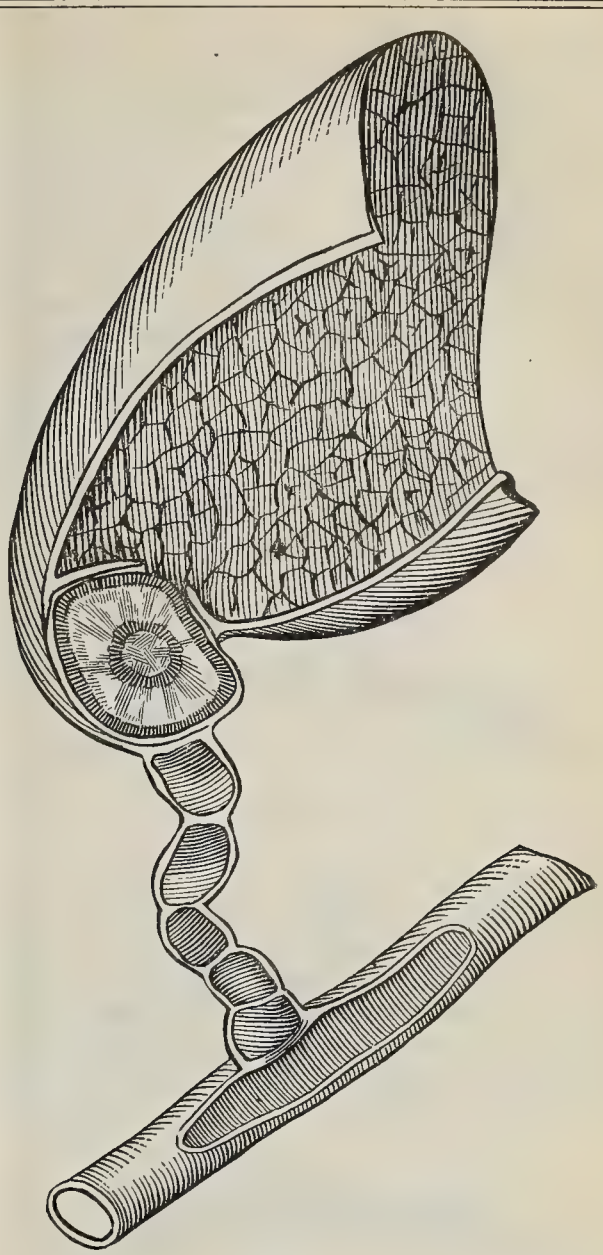

Fig. I.

very difficult to pass the blunt end of the knife between the stone and the tissue in the dark, assisted only by the sense of feeling, this calculus suddenly yielded, the fingers of my left hand having forced it from its bed into the sac. I now easily removed the stone from the sac and after again assuring myself that there was no other stone or concretion anywhere in the system of gall ducts without the liver, I proceeded to close the cut into the gall-bladder. I had made up my mind long before, when studying the surgery of gall passages, that if I had a chance to try Sir Spencer Wells' proposition, of closing the gall-bladder by a suture and returning it to the abdominal cavity, I should do so. After all, this method comes nearer the ideal of a surgical *restitutio ad integrum* than any other, and although I did not make use of the continued suture as proposed by him, I have proven by the successful termination of this

case that the great ovariotomist's suggestion is practically correct. I shall return to this question in the epicritical remarks below.

While applying the suture to the incision of the sac, I noticed considerable oozing of blood within the sac. This bleeding ceased, however, before I had finished the introduction of the sutures. I used black, iron-dyed silk for the sutures, applied somewhat after the manner of the Czerny-Lembert suture, which Czerny and others have so successfully employed in their operations of excision of the pylorus. I first united the edges of the cut by the simple interrupted suture, using a

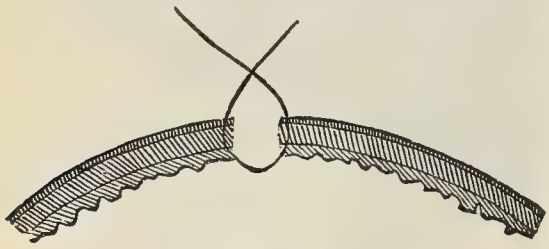

Fig. II.

very fine needle and the very thinnest silk. Seven sutures at regular intervals sufficed to accurately approximate the edges and close the wound. Before tying these seven sutures the sac was carefully cleansed by warm water injections, of some debris and small coagula that had formed within it. The sutures having been carefully tied, were cut short and

Fig. III.

I proceeded to introduce the Lembert sutures which were intended to embrace only the peritoneum and perhaps some fibres of the muscular coat. It is well to remark in this

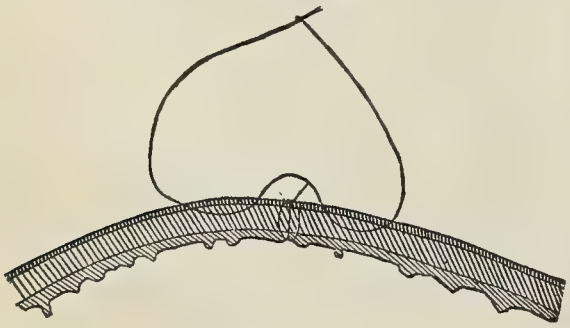

Fig. IV.

connection that after the sac was emptied and contracted the peritoneal as well as the other coats were much thickened and in excellent condition for the application of sutures. I applied eight of these Lembert sutures in such a manner as to completely cover the simple interrupted sutures when tied, and not only in the length of the original cut, but so as to have one stitch of the peritoneal suture beyond the ends of the incision as is shown in the accompaning Zincotype Fig. VI,

Fig. V.

which will also give a more accurate conception of the suture employed than I could otherwise impart.[1] No blood or any other foreign sub-

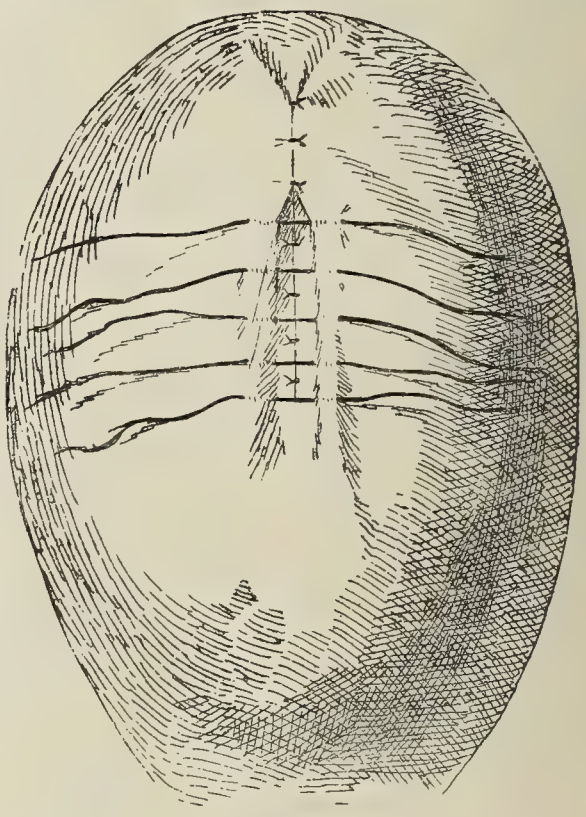

Fig. VI.

stance having escaped into the peritoneal cavity, the toilet was unnecessary and I pro-

1. I have taken great pains to make the illustrations of the suture employed in this case a true representation. If this suture has been well figured before in American surgical literature it has escaped my notice. Interrupted suture seems to me very much preferable to any other, but especially to the continued suture. Too much importance can not be given to the accurate finesses of suturing in the abdominal cavity. I would recommend the finest (thinnest) kind of silk. The knots must not be drawn too tightly and the ends should be cut very short. They will not slip the easier for being cut close. Fine silk is less irritating than catgut, which can not be furnished of reliable quality as thin as it should be for sutures of the intestine.

ceeded with the closure of the abdominal wound in the usual manner. A hypodermic injection of morphium was given and the patient was removed to her bed. I will state that none of the so-called Listerian or "antiseptic tricks" were made use of. All possible regard was paid to cleanliness and perfect purity of all instruments, sponges and extraneous materials used during the operation. Clean water was used, unadulterated by bichloride of mercury, carbolic acid or any other poison. In numerous laparotomies and other capital operations, I have had good reason to be satisfied with my results since I have abandoned Listerism, which I was taught to use while a student and assistant of the late lamented Prof. Gustav Simon, of Heidelberg.

The patient had no dangerous symptom after the operation whatever, her pulse never rose above 100 and her temperature never reached 101° F (38½°). The only symptom worthy of mention that I noticed during her recovery was an excessive vomit of nearly pure bile which occurred on the evening and the night after the operation. Her husband estimated the quantity at about one china wash-bowl full. The fluid which I saw her vomit that evening, certainly was nearly pure bile and I have been at a loss to explain this curious occurrence to my satisfaction. The lady left her bed on the 21st day, and has gained some twenty pounds in weight since the operation. She now enjoys perfect health.[1]

ANATOMY.

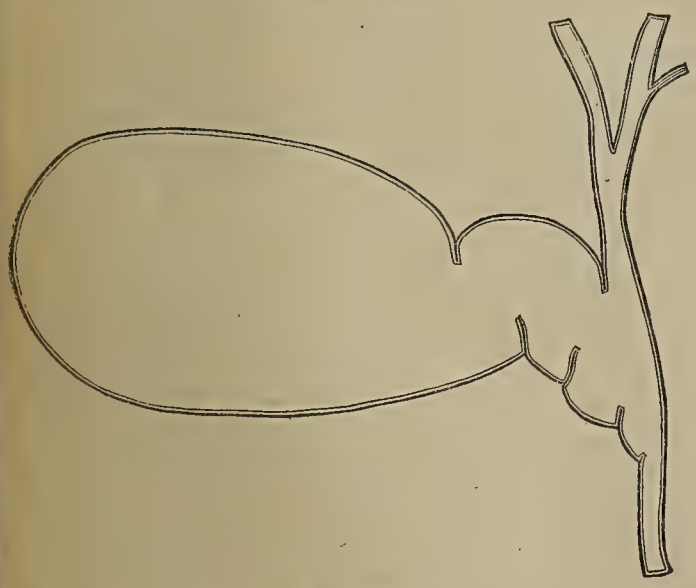

FIG. VII.

The above cut represents a section of a gall-bladder and the biliary ducts after they had been injected with alcohol and hardened. The specimen is from a cadaver that I performed a post-mortem on, the patient having died from apoplexy. During the past winter I have paid considerable attention to the parts involved in the present discussion, and I examined twenty livers in the dissecting-room or at autopsies, with a view to familiarize myself with the exact relations of the biliary passages. The patient was 49 years of age, had no liver symptoms and none pointing towards disease of the gall-bladder. It is the only case in which any distinct abnormity was found. All the others correspond, more or less exactly, to the description given in our text-books of anatomy. The abnormity in this case consists of a very much dilated cystic duct; in other words, the opening of the gall-bladder into the common duct is a very large one, the cystic duct being only represented by some rudiments of Heister's valve, in the shape of shallow folds of the parietes. The walls of the bladder are normal in thickness and structure. There are no signs of chronic inflammation either in the mucous membrane or in the connective tissue surrounding the ducts. The peritoneal covering is also normal. The contents were thin, normal bile. This observation appeared to me of sufficient importance for publication, principally because of its rarity and also because it would seem that a ligature of a gall-bladder in this condition for the purpose of its removal might result in the direct failure. In the first place let it be remembered that the healing process after ligating a canal lined with mucous membrane, i. e., the permanent closure is primarily independent of the epithelium, but is achieved by the formation of a cicatrix in the plastic material thrown out by the connective tissue surrounding the ligature and the stump. No doubt this process is easily achieved when the cystic duct is of normal dimensions. But let us suppose a ligature were to be thrown around the opening of a gall-bladder in such a manner that the neck is drawn together and the points a and b approximated. This constriction would necessarily cause a folding of the hepatic duct, the consequences of which can not be exactly given, but would certainly cause peculiar complications of the healing process. Although the condition above described is probably a very rare one, I am sure it deserves our attention and in fact can be regarded as a contra-indication to cholecystectomy, if this operation be contemplated. The only explanation I can give of my discovery is that, it is a congenital deformity- None of the circumstances warrant me in supposing a

1. The patient at this time, October 1, 1885, is in splendid health, living at Fayetteville, Ills.

dilatation caused by the passage of a stone.

PHYSIOLOGY.

But little is known of the influence and uses of the human bile. We thoroughly understand its chemistry, we know approximately the quantity of the secretion. As good as nothing is known of the use and function of the gall-bladder. We do not know whether it is filled and emptied periodically, or whether the flow is a constant one. I have vainly searched in literature for a statement of the amount of pressure normally present in the bladder or the ducts. In a case where I performed laparotomy on the supposition of cholelithiasis, I found the gall-bladder a flabby sac, containing no calculi, and I could squeeze the bile out of the bladder with great ease by compressing the thin normal sac.[1] There was certainly no amount of pressure in this flabby sac. It is certain that the glands in the walls of the bladder secrete mucus. LAWSON TAIT believes this mucus contains some kind of ferment. The fibrous layer of the gall-bladder contains some muscular tissue. I have found it present in all bladders, but it is very thin and weak. Since the operation of cholecystotomy with the establishment of an abdominal, direct, biliary fistula has been performed on the human subject, numerous observations and experiments have been made in order to determine the use of the bile to the organism. In a number of cases where these fistulas persisted for months (seven months in one case) the stools were almost milkwhite and the entire amount of the bile dribbled out of the fistula, not the slightest symptoms of disease or disturbed digestion or alimentation could be observed.[2] The administration of calomel, iron, salts, podophyllin, aloes or rhubarb do not seem to have the slightest effect upon the quantity or chemical constituents of the secretion. No effects have been noticed either after the administration of quinine, morphine or cocaine. In some cases the patients have gained in weight and health while losing all their bile through a fistula. Tait says there is not the slightest evidence of flatulence and decomposition which is said in the text-books to accompany biliary fistula. After a careful perusal of all the accessible literature on this subject I have come to the conclusion that the bile is almost if not entirely as much of an

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1. I performed laparotomy in this case on Sunday, November 6, 1884, in the presence of Dr. Louis Bauer, Dr. C. Barck, Dr. Thornton, and a number of students. The diagnosis was cholelithiasis; patient had been a sufferer for about three years, had been treated by a number of our best practitioners (Drs. C. Heyer and Nidelet). They all diagnosed gall-stones and administered opium or morphine, during the frequent and extremely painful attacks of colic. I witnessed several of the attacks myself and was perfectly convinced of the presence of gall-stones, having found the urine normal and no symptoms of disease of the stomach or intestines. The patient is a Belgian, very brown skin, icterus had never been made out with certainty, and although a careful search of the stools after the last four accesses of colic had failed to discover a calculus, I was not shaken in my opinion. The patient himself was also convinced that he had gall-stones. Since he had the unanimous opinion of six or seven worthy physicians, he not only consented, but urged me to perform an operation which he knew to be dangerous. His spasms and pains were so terrific that they nearly made him unconscious, and he would writhe on the carpet or the bed in fearful agony until relieved by an opiate. His hope for permanent relief from these sufferings, as well as my promise that he would be cured if he survived the removal of the gall-stones, made him eager for the operation. After opening the abdomen and introducing my hand far enough to examine all the bile vessels, the duodenum and stomach, and finding them all, most surprisingly normal, I closed the wound. The healing process was rapid and simple. The patient left his bed after two weeks. He was under the influence of chloroform one hour. Fortunately, there were no attacks of colic during the three weeks after the operation, and, indeed, there were none for about seven weeks. The patient, who was informed of the futility of our operation and the error of diagnosis, as well as I myself, began to entertain hopes that the operation after all had in some unaccountable way cured his spasms, which I then supposed were of a nervous origin. This patient, being thoroughly acquainted with the scientific error in diagnosis and the grave danger to which it had subjected him, nevertheless paid his bill most cheerfully—greatly to my surprise.

Some time in Jannary of 1885, while I was still confined to my room, recovering from an attack of septicemia, my former patient called on me and stated that he again suffered fearfully from his colics, perhaps worse than ever before, and that he had noticed blood in his urine after the last attack! A change came over the spirit of my dreams. Nephrolithiasis of the right kidney is now the diagnosis. I expect to remove the stones or perhaps the entire kidney by lumbar incision within the year, the patient being again willing to trust to the knife as a final resort.

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2. I had the good fortune to see and clearly observe an aged negress during the past three years who claimed that eleven years ago the late honored Dr. J. T. Hodgen opened a boil in her right hypochondriac region from which at various times gall-stones have since been discharged. Her stools have been clay-colored ever since, all the bile escaping at the fistula. I can testify to the good health of this woman; she has no extraordinary flatulence nor any other of the symptoms usually ascribed to this trouble. Cholecystotomy might even now lead to the detection of a curable obstruction in her case and consequent closure of the fistula.

excretion as the urine. Even the much praised emulsifying power of the bile is probably only an accidental quality, certainly not a necessary one. The trypsin of the pancreas according to KUEHNE is entirely sufficient to emulsify all the fats that come into the intestines.

SURGICAL PATHOLOGY.

Messrs. J. H. MUSSER and W. W. KEEN, in an exhaustive paper on cholecystotomy, published in the American Journal of the Medical Sciences, October, 1884, give a tabulated report of all cases recorded in literature up to that time, with medical and surgical comments. But few additional cases have been published since then, and I may refer to this careful and interesting study for the historical and statistical information we have on the subject. Only one important paper has appeared since; LANGENBUCH, "Some points concerning operations on the biliary system," Berliner Klinische Wochenschrift, December, 1884, Nos. 51 and 52. The author treats principally of cholecystectomy giving a defense of this operation. He is its inventor and has had three successful cases out of five operations. Tait speaks of three deaths out of six and declares Langenbuch's operation to be "intrinsically absurd." Langenbuch enters into a lengthy discussion and tries to avert Mr. Tait's criticism, accusing him of errors and absurdities. Sir Spencer Wells' proposal receives severe criticism at the hands of both these gentlemen. I cannot enter here into a discussion of the opinions of these gentlemen and will confine myself exclusively to the facts. Langenbuch formulates his conclusion in regard to the indications for operative procedure into nine propositions. Their consideration in regular order will enable me to bring out all the points that have been determined heretofore, as well as any new ones that may be proven by my successful case, which is the first of its kind. Before entering upon this task I may mention the different methods of operation which claim our attentive deliberation.

All cases where the formation of a biliary abscess either led to the natural end of pointing, followed by the spontaneous discharge of calculi, or where such an abscess was opened by artificial means and the stones extracted, belong within the realm of minor surgery, their treatment offers no dark points, and is consequently excluded from our consideration.

I. The first and most frequently practised method is cholecystotomy with the formation of an abdominal fistula. The incision is usually made parallel to the free margin of the liver an inch or two below the ribs. This is Sims' operation. Lawson Tait says of it: "It has satisfied me that my much lamented friend, Dr. Marion Sims, laid down principles from which we are not likely to depart with any advantage, and that he practically perfected this operation, though he did not meet with a successful result in his case." "The conclusion of the surgical experience in these cases is, that the entire possibilities of the treatment of gall-stone and distended gall-bladder are exhausted in Dr. Marion Sims' original paper published in the British Medical Journal, that no further extension of it seems possible, and that no further experimentation, such as that of Spencer Wells and Langenbuch, seems desirable." I have found forty-two cases of this operation in literature with ten deaths and thirty-two recoveries, a mortality of 23.5 per cent. Seventeen of these operations were done by Lawson Tait without a single death.

II. The second operation seems to have been done five times, three recoveries and two deaths; the reports are very vague and unreliable.

Bobbs, of Indiana, June 15, 1867, did an operation which he calls lithotomy of the gall-bladder. There was an obscure abdominal tumor, and after having done laparotomy he incised the gall-bladder, removed some calculi, put one stitch into the incision and dropped the gall-bladder back. The patient recovered, thereby greatly surprising the attending physicians.

An anonymous surgeon mentioned by Tait did the operation; the patient died (particulars unknown).

Courvoisier did an operation somewhat similar to my own, of which I am also unable to find particulars; the case ended in recovery.

The fourth case was done by Meredith, Ashurst's International Encyclopedia of Surgery, Vol. 5, p. 1073; it was unsuccessful, the patient dying about forty hours after the operation. It is claimed that death was caused by suppression of urine and that the stitches in the gall-bladder were all right, although several ounces of bile were found in the folds of the mesentery.

The fifth case is my own, which is detailed above, resulting in complete recovery. It is clear that this operation restores the parts involved entirely to their normal state.

III. The third procedure is called Langenbuch's operation, or cholecystectomy. It consists in ligating the cystic duct and dissecting away the entire gall-bladder. Five

cases by Langenbuch, two deaths. Courvoisier, one case recovered, 33½ per cent died.

IV. The fourth operative procedure is called cholecystenterostomy and was first put into practice by von Winiwarter in 1882. It has for its object the establishment of a communication between the gall-bladder and the small intestine in cases, where it is desired to prevent the loss of bile through an abdominal fistula, where either a calculus or some other organic disease has caused an obstruction of the common duct. Dr. J. McF. Gaston, of Atlanta, Georgia, has experimented on dogs in regard to the feasibility of this plan. His experiments were not concluded when he published his paper in October, 1884, in Gaillard's Journal. The manner in which he tries to make a communication between the gall-bladder and the duodenum is not clear. I find such a plan almost anatomically impossible in the human body. Some of those present will remember a short report I gave at the last meeting of this society, about a method of making a communication between any two given hollow intestines that could be easily approximated, by means of the elastic ligature. I stated then that a communication could thus be made between the gall bladder and the colon.

We can dismiss this procedure from our consideration, since it seems reasonably certain that the bile is not an essential factor of proper digestion, and that before we attempt to cure a trouble not necessarily fatal we should not subject our patients to surgical experiments endangering life.

At any rate it seems clear that if we attempt the operation of cholecystenterostomy at all, we would choose the colon as the most convenient bowel into which the gall-bladder might be stitched.

Von Winiwarter's case is as yet unique.

Let us now examine Langenbuch's nine propositions before we establish our own final rules. I have translated them, and I believe they have never appeared in the English language before:

No. 1. Gall-stones are developed in the gall-bladder as a rule, only exceptionally in the biliary ducts of the liver, and never, or very rarely, in both localities simultaneously.

No. 2. Cholelithiasis (the gall-stone disease) requires surgical interference only in exceptional cases.

No. 3. This interference or treatment may consist in the simple evacuation of the calculi from the bladder, or in the total extirpation of the bladder.

No. 4. Both operations should only be performed when the common duct is patulous, and when there is no sign of icterus; and only after the walls of the bladder have been carefully examined and the absence of calculi in the large ducts is proven.

No. 5. The mere evacuation is only permissible when the walls of the bladder prove normal, i. e., in fresh cases.

No. 6. This operation (Sims', Tait's) has serious defects under any circumstances, for (a) it necessitates the same inroad upon the abdominal cavity as extirpation (Langenbuch's). (b) The acts of sneezing, coughing or vomiting may cause fatal damage by rupturing the stitches which fasten the bladder to the abdominal incision. (c) It compels the establishment of an uncomfortable and injurious biliary fistula for an indefinite period of time; (d) and it gives no protection from a return of the disease, since it only removes the product but not the work shop of the disease.

No. 7. The operation of cholecystectomy, in comparison with the above, is without dangerous complications, and is radical since it precludes the return of the causative disease.

No. 8. Since the majority of cases of permanent obstruction of the common duct is in causal relation to cholelithiasis (direct occlusion by a stone; chronic inflammation with consecutive stenosis, or even malignant neoplasma following the frequent irritations and lesions which accompany the passage of stones) the operations should be contemplated early, in order to prevent this obstruction, and for the same reason extirpation should be preferred to evacuation.

No. 9. The only advantage that simple evacuation would have over extirpation might be said to be the lack of a gall bladder in case an obstruction of the common duct should be developed, and the operation of cholecystenterostomy would be planned. But even in this case a communication might be established between the immensely dilated hepatic ducts and a loop of intestine. Perhaps even an artificial communication might be made between the dilated common duct and the duodenum above the seat of stricture.

When Dr. Langenbuch drew up these conclusions, he was controlled by a firm belief in the hypothesis that, digestion can not exist in the long run minus bile. He furthermore plainly states in his article that he can not entertain the idea of uniting the incision in the gall bladder by sutures, and then abandoning it in the abdominal cavity. My own case proves that this idea is feasible, and that it must be entertained at least in some cases.

His hypothesis also is very much shaken by recent observations.

We must agree with the first and second of Langenbuch's theses. They are well established rules of pathology and therapeutics.

The third proposition does not claim our consent. We discard it on the grounds of insufficiency. It does not cover the case.

The fourth proposition is totally and radically false. The very contrary is true. Cholecystotomy should be performed when the common duct is occluded by a calculus or otherwise obstructed, whether there be jaundice or not. Cholecystectomy should not be performed in this condition.

Nature teaches us in these cases. Nearly all biliary fistulæ of spontaneous origin are complicated with icterus and caused by obstruction of the ducts, followed by adhesion and abscess. We must follow nature; her course is a wise one and has saved many lives. Where there is obstruction of the ducts we must perform cholecystotomy, the indication is vital. Cholecystectomy would lead to extravasation of bile, peritonitis and death. This restriction applies only to cholecystectomy, but not to the other operations.

Proposition five is equally erroneous. Sims' operation is indicated when we have severe ulceration, and when we find the walls of the bladder diseased. It should not be limited to fresh cases. Tait's cases prove this conclusively. We are accustomed to find the mucous lining of the bladder after lithotomy in a very bad state of chronic thickening and ulceration; sometimes even large sloughs are found. This condition is due to the irritation of the stones. After the removal of the stone the bladder returns to its normal state in a remarkably short space of time. The same is true of the gall-bladder after the establishment of an opening.

The sixth proposition is intended to clearly call attention to the defects of cholecystotomy. The first objection appears to be untrue at a glance: "It necessitates the same inroad upon the abdominal cavity as extirpation." The time required for the removal of the entire organ must be greater than that required for merely opening and stitching it to the abdomen. The lesion made by detaching the gall-bladder from the lower surface of the liver also seems to be a source of trouble that is entirely avoided in cholecystotomy, either Sims' or the ideal.

The second objection is perhaps well taken. But in the light of Tait's and others' experience is unimportant, and up to date only an imaginary danger.

The third objection is also true, but is not of vital importance, inasmuch as we must always choose the lesser of two evils in our attempts to cure disease.

The fourth objection is not well taken, for we have no kind of guarantee that a calculus may not descend from the bile ducts of the liver and obstruct the common or larger ducts, after the removal of the bladder. It is well known that the last three-quarters to one inch of the common duct is the narrowest part of the entire length. Then, indeed, unless a passage of the calculus is soon effected, a fatal jaundice or rupture must ensue. The gallbladder would seem to be a sort of a safety valve into which the bile that cannot escape through the common duct is stored for a time. There are cases known where the gallbladder became so much distended that it reached into the pelvis, and still recovery by natural means was seen to follow. Supposing now that the gall-bladder had been removed entirely, it is evident that the remedies of nature must fail. There can neither be distension of the safety bag, nor can there be the establishment of a fistula, either by natural or artificial means. The mere fact of a diseased condition of the gallbladder is not sufficient reason for us to remove the entire organ. If the disease is curable by merely opening the bladder for a period of several weeks we dare not remove it. If the gallbladder, however, is attacked by malignant disease, as for instance, epithelioma, sarcoma or some form of carcinoma, its extirpation would be very proper.

Proposition No. 7 is evidently untenable, as we have just seen.

Proposition No. 8 is a partial contradiction of his own No. 2. The afterthought which is thrown in has been refuted under the discussion of No. 6 and 4.

Proposition No. 9 merely proves that the author himself, feeling the weakness of his position, is compelled to find an outlet from the false position in which he has placed himself, or rather it is a vague proposition for some very daring surgery with which he would try to save the lives of the patients who might fall victims to an obstruction after his operation, cholecystectomy, had been performed on them.

Having now arrived at the end of the work, I may be permitted to offer my own conclusions and I respectfully submit them as folfows:

I. THE CAUSES WHICH INDICATE AN OPERATIVE INTERFERENCE WITH THE SYSTEM OF GALL VESSELS ARE: *a*, JAUNDICE, *b*, PAROXYSMAL PAIN OR A TUMOR IN THE RIGHT HYPOCHONDRI-

AC REGION; *c*, SUPPURATION; *d*, PERITONITIS;[1] THESE CONDITIONS TO BE EITHER SEVERALLY OR SINGLY RECOGNIZABLE, THE PRESUMABLE ORIGIN BEING BILIARY CALCULI; *e*, MALIGNANT DISEASE.

II. EXPLORATIVE LAPAROTOMY MUST BE PREFERRED TO ACUPUNCTURE OR ASPIRATION AS A DIAGNOSTIC MEASURE.

III. THE INCISION IN THE LINEA ALBA IS PREFERABLE WHEN THERE IS MUCH DOUBT REGARDING THE SEAT OF OBSTRUCTION, BECAUSE THE LARGE DUCTS CAN BE REACHED MUCH BETTER FROM THIS INCISION THAN FROM THE INCISION PARALLEL TO THE FREE BORDER OF THE RIBS.

IV. THE ESCAPE OF BILE THROUGH AN ABDOMINAL FISTULA IS NOT INJURIOUS TO THE PROCESS OF NORMAL DIGESTION. THE BILE IS AN EXCRETION, AND PROBABLY OF NO MORE USE IN THE INTESTINAL CANAL THAN THE URINE IN THE BLADDER.

V. JAUNDICE, WHEN CAUSED BY AN OBSTRUCTION OF THE COMMON DUCT IS NO CONTRAINDICATION TO NATURAL CHOLECYSTOTOMY. WE MAY OFTEN SAVE LIFE BY ITS EARLY PERFORMANCE.

VI. CHOLECYSTOTOMY, NATURAL AND IDEAL, AND CHOLECYSTECTOMY ARE THE THREE OPERATIONS AT OUR SERVICE; CHOLECYSTENTEROSTOMY MAY BE USEFUL, BUT IT HAS NOT YET EARNED A PLACE AMONG APPROVED SURGICAL PROCEDURES.[2]

VII. IDEAL CHOLECYSTOTOMY IS INDICATED WHEN THE BLADDER IS NORMAL IN STRUCTURE AND WHEN THE GALL-DUCTS HAVE BEEN CLEARED OF OBSTRUCTING CALCULI.

VIII. NATURAL CHOLECYSTOTOMY IS INDICATED WHEN THE BLADDER IS ULCERATED OR SUPPURATING, OR WHEN THERE ARE PERMANENT OBSTRUCTIONS BEYOND REACH AT THE TIME OF OPERATION.

IX. CHOLECYSTECTOMY SHOULD BE LIMITED TO CASES OF OTHERWISE INCURABLE OR MALIGNANT DISEASE OF THE GALL-BLADDER.

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1. I was much surprised to find that no author has enumerated peritonitis caused by perforation of the gall-bladder among the indications for cholecystotomy. In calling the attention of the surgeons to this point, I anticipate universal consent. I am in a position to know of at least one case where my operation would, most probably, have saved a thoroughly useful life. I refer to the sad and premature death of Dr. John T. Hodgen. The post-mortem in his case proved the sole cause of death to be peritonitis, caused by a minute perforation of the gall-bladder. He had been a sufferer from periodical attacks of biliary colic for many years.

2. The case of Dr. Chas. Parkes, of Chicago, would seem to prove that the sounding of the common duct through the external opening should be enumerated among the operative procedures in this connection His case is unique in many ways, and although this method was successful in his own case, the author modestly thinks it would be presumptuous to advise its general use. I hope that Dr. Parkes will be able to keep his case in view for some time to come and report progress.

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SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, Oct. 24, 1885. The President, Dr. Atwood, in the chair.

Cocaine and Its Effects.

Dr. Loftus asked if any of the members had had any further experience with cocaine.

Dr. Fry had used it hypodermically six times. The first case was one of sciatica in a powerful man, and one grain had no effect. He used a grain and a half on each of two more occasions with no effect, although employed when the pain was passing away. In another case, a girl of thirteen with hysterical paralysis and melancholia, one grain hypodermically, upon two different occasions, had no effect. In a case of morphiomania the patient, a women, took a grain and a half of morphia daily. Here a grain of cocaine hypodermically given produced an exhilaration and flushing, together with an increased pulse lasting about fifteen minutes.

Dr. Pollak has used it over 100 times. In a case of dipsomania which he has reported to the society, it acted admirably, and the effect has been lasting. He had recommended Dr. Bauduy to use it in St. Vincent's asylum, and the results have been splendid, some of the patients stating that a bottle of whisky under their pillows would not tempt them. Dr. Bauer, he stated, had read an interesting paper on cocaine. (See a former number of the Review.)

Dr. Hulbert detailed a case in which the patient took as high as twenty grains of morphia in twenty-four hour hours, besides being a alcohol drinker. This patient was placed upon cocaine and the morphia habit was cured but the desire for alcohol still remained.

Dr. Dickinson had used the drug with suceess in various operations upon the eye.

Dr. Dibbell had used it also in ophthalmic practice with success, but was convinced that it only acted when applied to mucous surfaces. In the case of a furuncle it was a failure.

Dr. Williams had also had success attending its use in oculistic practice. He had had a curious experience with it lately. A lady who had an ear trouble and suffered much had it applied by the doctor. After using it a day there was an attack apparently of erysipelas of the auricle and meatus, it being red and swollen. The anodyne effect of the drug was very temporary in this case.

Dr. Meisenbach had a case of persistent hiccough following an abortion, and due to uterine irritation. Three weeks ago he gave the woman small doses of cocaine by the mouth, and she was considerably relieved by it. He had recently read that fluid extract of ergot was also good for this.

Dr. Atwood had used cocaine some time since in a case of morphine habit in a man 62 years of age The immediate effect was marked, and had the power of apparently rejuvenating him, increasing his muscular power, making his mind clearer, etc. He saw him reeently and the man stated that he had no more desire for morphia. After being treated here for a week with hypodermics of cocaine, he took wine of coca. The doctor had also found the drug to work like a charm in a case of naso-pharyngitis.

Dr. Meisenbach stated that if Dr. Bauduy's report in a recent morning paper was true it only corroborated the accounts given of its use in Peru where its use has been prohibited, as it enthralls its victims and makes total wrecks of them in a short time. They become useless, debilitated and weak, both physically and mentally.

Dr. Rowland had used it in cases of minor surgery, with good effect. He gave the history of a case of powder burn of the cornea, where it acted well and enabled him to pick out the grains of powder without pain to the patient.

Dr. Atwood had instilled two drops of a four per cent solution for a violent neuralgia of the eyeball and it not only relieved it in a few minutes but it never recurred. He had taken two grains himself by the mouth, with no effect whatever.

Dr. Rowland stated that he had employed the oleate of cocaine for an operation for fistula in ano, with complete success.

Epistaxis.—Ergot Given and Cure.

Dr. Pollak was called to see a girl of ten, in the Missouri School for the Blind. She had had typho-malaria with high fever for some time before. Aconite and quinine brought the trouble under control. At eleven at night she suddenly had hemorrhage, and the next day was almost in collapse. She threw up blood, but upon examinination a drop was

seen to fall from the nose. She was lying down and thus swallowed it and vomited it up again. Fluid extract of ergot was prescribed but could not be retained. Then five drops were injected in each temple and the hemorrhage stopped. Whisky was given then and she rallied fast.

Dr. Meisenbach suggested that the hemorrhage might have been controlled by pressure upon the internal maxillary artery. He had already reported such a case in an old woman, where every other means failed. Three weeks ago, in scarifying a lady's tonsils, he incised the anterior fold of the velum. Some little time after she expectorated blood very freely. In this case he applied pressure to the carotid and the hemorrhage ceased. He used ergot also, and the case progressed to recovery.

Dr. Pollak inquired whether in his case the exsanguination really had not more to do with the cessation of the bleeding than the ergot.

Dr. Atwood had stopped epistaxis almost immediately by hypodermics of ergot.

Dr. Hulbert made no distinction in respect to the dose he used, employing the same amount hypodermically as by the mouth.

Hemorrhage of Bladder.

Dr. Rowland has used ergot with good results in several cases of hemorrhage. In one case, however, it failed signally. The patient at her last period had but a slight flow; there was vesical hemorrhage, and he suspected it was a vicarious flow. Ten minims every hour for a time relieved the trouble. There was no strangury. He had used gallic and sulphuric acid with no effect. Since then he has used turpentine in hemorrhage of the bladder with good success.

Dr. Dibbell stated that the amount of ergot given need never be limited. He had seen Dr. Fordyce Barker give half-ounce and ounce doses every fifteen minutes.

Dr. Green had given injections of tannic acid in solution in hemorrhage of the bladder with success and where almost everything else had failed.

Dr. Chancellor lately treated a man of twenty-seven who had bleeding from the bladder. Ergot, he said, failed, but ten drop doses of turpentine every two hours relieved him in six hours.

Acro-Neurosis.

Dr. Pollak saw a washerwoman, aged 60, who dragged her leg and said that last fall she had an attack of apoplexy and lost the use of her leg and of the opposite arm. The most interesting point in connection with this is that her leg from the foot to the hip becomes, at times intensely hot, and she must get up and apply cold water to it. Her arm on the other hand feels icy cold from the shoulder down. She evidently has some spinal trouble. There is no facial paralysis. She is doing well under a simple treatment of purgatives and massage along the spine.

Hysterical (?) Dysphagia.

Dr. Pollak saw a man of 40 who is a stonemason, and complained in January of a pain in the stomach whenever he eat. He could not swallow anything later on. When the bolus was once down he felt well enough. It was clearly dysphagia, but the man could give no cause for it. Dr. P. saw him in May. Nothing could be found to account for it. Five drops of a one grain solution of morphia were injected in the stomach, and in a short time he ate a slice of bread and drank a cup of coffee. He came the next day and the trouble had disappeared. An esophageal bougie was introduced and nothing found. He has been eating and drinking since. The diagnosis was hysterical dysphagia.

Dr. Thornton suggested that it might be dysphagia illusoria. This is caused by an anatomical peculiarity, the right subclavian artery coming behind the trachea and in front of the esophagus in such cases. The dysphagia comes on in paroxysms, or may be more or less permanent.

ITEMS.

—A copy of a manual on the "Treatment of Zymotic Diseases by Syrups and Subcutaneous Injections of Declat's Pure Phenic Acid and Topical Treatment by Declat's Glyco-Phenique" may be obtained by our readers by sending name and address on a postal card to the "Declat Manufactaring Co., 86 Warren street, New York.

—Dr. W. C. Wile, the editor of the New England Medical Monthly, is to be addressed Newton, Conn., in the future. The publication office, however, is at 21 Fairland avenue, Bridgeport, Conn. Mr. Joseph Gould is publisher.

The Rumford Chemical Works, Providence, R. I., manufacturers of Prof. Horsford's Acid Phosphate, have recently purchased a commodious building and warehouse near their present location, where they propose to move their business a few months hence. This purchase has been necessitated by the demands of their large and increasing business, and it is pleasant to record such an evidence of well deserved success and prosperity.

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IS CANCER HEREDITARY?

In a most valuable paper read by Herbert Snow of London before the British Medical Association at its Cardiff meeting a large array of figures from the results of a circular inquiry and from several large English hospitals is given and a general view presented, the salient features of which are as follows:

"First of all, it is well to remember that, when we seek the origin of cancer, heredity cannot possibly be a vera causa. It relates only to the transmission of cancer—in no way touching the first appearance of the disease. Then, how far are statistics in general competent to throw light upon this question? Statistics are proverbially fallacious, and easy to manipulate, according to the more or less unconscious bias of the writer. Witness the volumes of arithmetical arguments poured forth for and against the Contagious Diseases Acts, or the Vaccination Acts; too often they serve rather to obscure our perception than to enlighten it, and, in the present question have the very obvious drawback that they of necessity must be almost entirely based upon hearsay evidence, upon traditions and memories of the vaguest possible character, and upon pathological ignorance in an extreme degree. To point out a few of the fallacies which are involved: there comes first the influence of the preconceived idea, so that a cancerous patient feels almost compelled to find some one in the family similarly afflicted, whenever it is in the least possible to do so, both as a matter of mental satisfaction to herself and friends, and also in order to comply with the usual assumptions of her medical attendant. Anything in the shape of a tumor, be it the simplest fatty or sebaceous growth which has ever affected a relative, is thus pressed into the service; and women will not infrequently quote to you a husband's second cousin, or some similarly near kinsman, as evidence of "cancer being in the family." Then we must make allowance for mistakes of diagnosis, for the obscurity which often envelops the cause of visceral maladies and for the rarity of port mortem examinations on such cases when they occur in ordinary practice—a point which indicates that we must by no means impute infallibility to the Registrar-General's returns. Hence, for my own part, I should place far greater reliance (in forming an opinion on this and kindred topics) upon a moderate number of cases in which the evidence had been judicially sifted, and was not in the smallest degree hearsay, than upon any, however large, mass of statistics with these requisites unfulfilled.

Yet I would venture to lay some stress upon the negative value of the figures I have quoted. In my own experience—and I would confidently appeal to that of most other medical men, especially to those who have themselves had cancerous relations, to confirm this—whenever a person dies from cancer the fact is circulated far and wide among all his or her kinsfolk and acquaintance, who forthwith store up the fact in their memory; and according to the more or less emotional nature of the individual, ever afterwards more or less dread a similar fate. Such is the popular terror of cancer, and such the deeply rooted belief in its hereditary nature; so that, in questions about a cancerous family history, it appears to me far more likely that we should be misled in the affirmative direction, than that any instance of cancer, which has really occurred, should have been forgotten by the kinsfolk of the sufferer. And I am,

therefore, disposed to hold that the negative answers of 806 out of 1,075 patients afford rather strong presumptive evidence against the hereditary transmission of cancer as a general rule.

I would submit to you that any degree of relationship wider than that of parent and child, or of grandparent and grandchild, is of little or no value in establishing the fact of an inherited taint.

Here is an argument which I take the liberty of borrowing from a valuable paper on the same subject, by Mr. Harrison Cripps, in vol. xiv of the St. Bartholomew's Hospital Reports, in which hereditary statistics are used, as it were, in an inverted fashion. If cancer were ordinarily hereditary, we should naturally find that, among the parents of cancerous patients, the death-rate for cancer would be far larger than that prevailing among the general population. Now, in the years 1861 to 1870, the death-rate from cancer among adults over twenty years of age, as computed from the Registrar-General's returns, was 1 in 29.1; while among the parents of cancer-sufferers, it is, according to Sir James Paget, 1 in 24.8; according to the St. Bartholomew's Hospital Reports, 1 in 28. The two rates are substantially identical.

Then, as instances of widely spread popular credulity, in support of which (during the prevalence of the superstition) an overwhelming mass of testimony could at any time readily have been brought forward, I would refer to witchcraft, magic, fairy tales and miraculous cures wrought by relics. The history of those in Mr. Lecky's works should clearly teach us caution in accepting popular traditions, however venerable and time-honored, without due investigation, and without a reasonable amount of preliminary scepticism.

I should like to glance now for a moment at the practical outcome of the belief that malignant disease is always, or almost always, hereditary. In the first place, the surgeon who holds it necessarily regards cancer thus as a constitutional malady almost sure to appear (in the predisposed) at a certain time of life; and therefore is, if excised, certain to recur, sooner or later. Hence, in cancer of external sites, he looks upon an operation as a palliative, and as a mere matter of routine, to be undertaken because we can do nothing else; he is rarely in a hurry to attack the disease; and when he does operate, cares only to steer clear of the disease visible to the naked eye and pays little heed to the adjacent glands, and the track by which the malady ordinarily extends. Now I conceive that everyday clinical experience teaches us that malignant disease of whatsoever form is, at the commencement, strictly a local disease, starting at one point, next extending around that point as from a focus, but then proceeding to locate itself at distant centres, along a definite track which can usually be predicted. The epithelial forms, glandular or otherwise, are the most typical instances of this proposition. In the more diffluent varieties of sarcoma, especially when the bony system is affected, its truth is sometimes obscured by the friable character of the growth, which allows infinitesimal portions to be swept off at a very early period into the circulating current, and deposited as grafts in distant localities, there to grow vigorously pari passu with the parent tumor, or even to outstrip it.

Such a conception will necessarily lead to as early as possible a resort to surgical measures; to an operation which will aim at the most complete eradication of the disease, whenever possible; to incisions wide of the visible tumor; to the extirpation of an extensive margin of tissue, healthy to the naked eye, but in which we surely know that invisible cancerous germs are present; and, most important perhaps of all, to the most careful search for, and extraction of, all the adjacent lymphatic glands lying in the track by which the disease ordinarily spreads. And though, mainly from the difficulty of securing this last object with certainty, it cannot be denied that the surgical treatment of cancer is uphill work, and that even the most careful endeavors too often fail to attain complete success; yet, unquestionably, the benefits we confer are in exact proportion to the measure

in which we are enabled to carry out these aims. That is to say, we shall, in many instances, I firmly believe, be rewarded by a permanent cure; in most others, we shall prolong life and greatly mitigate suffering. As an illustration which I have occasion rather frequently to notice, of the last point, I may be permitted to refer to the agony which patients with scirrhus of the breast suffer, in the later stages, from the well-known brawny edema of the arm—a condition entirely obviated by well scraping out the contents of the axilla, as a routine practice, whenever the breast is removed, whether the glands be obviously enlarged or not.

In the second place, the medical man who looks for history of hereditary transmission will often be misled in his diagnosis by its absence. On the other hand, I have long found that, whenever a patient quotes to me several cancerous relatives, that statement at once raises a strong presumption in favor of the patient's own disorder being non-malignant.

Thirdly, the fatal theory of heredity often prevents the subject of cancer from seeking medical advice till the disease is too far advanced for any useful treatment. When told what is really the complaint, and blamed for delay in not applying sooner, the reply is, "Oh, there has never been any cancer in the family, and I thought cancer was always hereditary."

Lastly, the glandular ephitheliomata, and probably other forms of malignant disease, are preceded, in a very large number of instances, by conditions inducing mental depression; often, under such circumstances, that one is forced to regard this not merely as a predisposing, but as the directly exciting cause. It is obvious that the sword of Damocles, which the belief in heredity holds suspended over the heads of any unfortunate enough to have lost a relative from cancer, must act powerfully as a mental depressor; and that we may possibly here find another illustration of the well-known tendency of a prophecy to work out its own fulfillment. I am tempted thus to explain the rather large number of instances among my statistics, in which mother and daughter were affected by cancer; as also, in some measure, the very considerable preponderance of the female (and so more emotional element) among the cancerous relatives.

I feel that many apologies are due from me for detaining the meeting at such length on what may possibly seem to them a well-worn topic. I can, in extenuation, plead only my conviction: 1. That the belief in heredity is derived merely from popular tradition, and is wanting in any sound basis of scientific proof: 2. That extremely practical issues are involved, and that the views now prevalent lead to disastrous results.

Dr. Davies Thomas (Adelaide) thought that the subject had been very clearly discussed by Dr. Snow, and added that it had been, for some years past, the custom of the leading Life Assurance Society in the southern hemisphere (the Australian Mutual Provident Life Assurance Society), not to demand any additional premium upon the lives of those individuals in whose families cancer was reported to exist. He also thought that Dr. Snow's warning against counting all forms of malignant disease in a single class, was worthy of attention, for statistics in which epithelioma, sarcoma, scirrhus, and encephaloid, were considered as one disease, must prove of very doubtful value."

Regulations for the Maintenance of Quarantine Inspections on the Northern Frontier of the United States.—Dr. John B. Hamilton, Supervising Surgeon-General U. S. Marine Hospital Service, has issued the following circular:

The act approved April 29, 1878, entitled "An act to prevent the introduction of contagious or infectious diseases into the United States," provides that no vessel or vehicle coming from any foreign port or country where any contagious or infectious disease exists, or any vessel or vehicle conveying persons, merchandise, or animals affected with any contagious disease, shall enter any port of the United States, or pass the boundary line

between the United States and any foreign country, except in such manner as may be prescribed under said act.

Attention is now directed to the prevalence of the contagious and infectious disease of smallpox in Montreal and other places in the Dominion of Canada, and the law referred to is held to apply alike to trains of cars and other vehicles crossing the border, and to vessels entering ports on the northern frontier.

Because, therefore, of the danger which attaches to the transportation of persons and baggage, and articles of merchandise, or animals, from the infected districts, the following regulations are framed, under the direction of the Secretary, and subject to the approval ot the President, for the protection of the health of the people of the United States against the dangers referred to:

1. Until further orders, all vessels arriving from ports in Canada, and trains of cars and other vehicles crossing the border-line, must be examined by a medical inspector of the Marine-Hospital Service before they will be allowed to enter the United States, unless provision shall have been made by State or municipal quarantine laws and regulations for such examination.

2. All persons arriving from Canada by rail or otherwise, must be examined by such medical inspector before they will be allowed to enter the United States, unless provision has been made for such examination as aforesaid.

All persons coming from infected districts, not giving satisfactory evidence of protection against smallpox, will be prohibited from proceeding into the United States until after such period as the medical inspector, the local quarantine, or other sanitary officer duly authorized, may direct.

4. The inspectors will vaccinate all unprotected persons who desire, or are willing to submit to, vaccination free of charge. Any such person refusing to be vaccinated shall be prevented from entering the United States.

5. All baggage, clothing, and other effects, and articles of merchandise, coming from infected districts, and liable to carry infection, or suspected of being infected, will be subjected to thorough disinfection.

6. All persons showing evidence of having smallpox or varioloid, or who exhibit a well-defined mark of recent vaccination, may be considered protected, but the wearing apparel and baggage of such protected persons who may come from infected districts, or have been exposed to infection, will be subjected to thorough disinfection as above provided.

7. Custom officers and U. S. medical inspectors will consult and act in conjunction with authorized State and local health authorities so far as may be practicable, and unnecessary detention of trains or other vehicles, persons, animals, baggage, or merchandise, will be avoided so far as may be consistent with the prevention of the introduction of diseases dangerous to the public health into the United States.

8. Inspectors will make full weekly reports of services performed under this obligation.

9. As provided in section 5 of said act, all quarantine officers or agents acting under any State or municipal system, upon the application of the respective State or municipal authorities, are empowered to enforce the provisions of these regulations, and are hereby authorized to prevent the entrance into the United States of any vessel or vehicle, person, merchandise, or animals prohibited under the act aforesaid.

10. In the enforcement of these regulations there shall be no interference with any quarantine laws or regulations, existing under or to be provided for by any State or municipal authority.

The Surgery and Pathology of Tenesmus of the Rectum.—Dr. J. Headly Neale thus writes in the Lancet (Med. and Surg. Reporter):

A short time ago, attention was called in a contemporary journal to the treatment of the spasmodic contraction of the sphincter ani by digital dilatation, a modus operandi concerning which most of our standard surgical textbooks afford but scanty information. Mais-

sonneuve was probably the first to bring it into notice; and Holmes, in the last edition of his "System of Surgery," speaking of an "operation that has lately been recommended in France," condemns it as "unsurgical," at the same time admitting the evidence of its success. So far back as 1877, we find Erichsen, after recommending the trial of belladonna by suppository, which at best could only relieve symptoms without removing the cause for this distressing complaint, writing thus; "Should these means fail, the patient must be anesthetized, and the sphincter forcibly dilated with the surgeon's fingers." As "nothing succeeds like success," the following particulars of a case I was asked to examine with a view to operative interference may be of interest.

Mrs. F——, wife of a well-to-do farmer, aged fifty-nine, nulliparous, stout, florid, and of a sanguine and neurotic temperament; menopause came on in the forty-ninth year. About eighteen years ago, a tumor, supposed to be ovarian, appeared in the right iliac region, freely movable, and about the size of a fetal head. It subsequently disappeared, and no trace of it now remains. The family history is good. Beyond a dyspeptic tendency, the occasional occurrence of piles, and of slight attacks of bronchitis in the winter months, the patient has always enjoyed good health until about fifteen months before the date on which I saw her, when the bowels began to act irregularly, defecation becoming both difficult and painful. The abdomen was greatly distended with flatus, which, however, was scarcely ever passed per anum. There was a continual desire to go to stool, sometimes recurring a dozen times a day, the attempt frequently proving abortive. The motions when passed were of a "flattened, tape-like character;" small doses of aperient medicine were constantly required, and the pain and difficulty in defecation increased. The patient's distress from distension, and what she termed a "growing up of the bowel," was so great that she consulted her medical adviser, who resorted to daily digital dilatation, and ordered warm water enemata to be frequently administered. This course of treatment in a measure relieved the condition; but as the patient began to look forward to the daily manipulation with much dread, a more detailed examination under anesthesia was recommended; and for this purpose I attended in consultation with her regular medical attendant. I first made a digital examination per vaginam, and found the os uteri normal and of the usual nulliparous character. A most unaccountable fold of mucous membrane high up in the vagina apparently divided that cavity into two compartments, and offered distinct resistance to the exploring finger. Passage of the sound showed the uterine cavity to be normal both in size and axis, thus negativing the existence of a uterine origin for the disease. The patient was then anesthetized, and a most careful examination of the rectum both digitally and by the speculum was made, but not the slightest trace of either ulcer or fissure could be found. Around the anal orifice, however, and for some distance above, were numerous polypoidal extrusions of old and absorbed piles.

Anesthesia being complete, two, three, then four fingers, and afterwards the whole hand as far as the knuckles, were introduced into the bowel. There was free, but at no time alarming, hemorrhage. Soon after returning to consciousness, the patient passed a perfectly natural motion, the result of an aperient injudiciously taken the night before. A warm water enema was then administered and a quarter of a grain of morphia suppository passed into the rectum. Twenty-four hours after the operation the temperature rose to 101°, the bowel was then irrigated with a solution of hyposulphite of soda (a dram to the ounce) and another suppository administered. The temperature speedily fell to, and afterwards remained at, the normal standard, the patient making an uninterrupted recovery.

The points of interest in this particular case were: (a) the presence and subsequent disappearance of an abdominal tumor in a highly neurotic female, suggesting the query, Was it of phantom origin, or was it a myoma under-

going spontaneous involution at the climacteric period? (b) the absence of any fissure or ulcer, or (c), of any uterine mischief to account for the painful symptoms; and (d) the presence of the sites of old and absorbed piles. Among the pleasing results of the treatment may be noted the complete cessation of these symptoms; the patient's intense satisfaction at once more being able to pass natural motions without pain; and, lastly, her uninterrupted recovery from the operation.

As regards the pathology of spasmodic contraction of the rectum and sphincter ani, where an ulcer or fissure exists the cause is not far to seek. The peripheral end-organs of a highly sensitive and complex nervous mechanism are exposed by a raw surface to the stimulus (whether mechanical or chemical) of the intestinal contents passing over them, and an inordinate contraction of both voluntary and involuntary muscular fibres is the result; but where no such evident cause exists, and nothing is to be observed save the "reliquiæ" of old and absorbed piles, we have to resort to a hypothesis for an explanation of the condition. The following appears to me to be a feasible one. On the occurrence of a pile, with its extravasation of blood, there is considerable distension of the submucous tissue; and just as inordinate distension of subcutaneous tissue by deposition of fat is followed on the disappearance of the latter by cicatrization and the formation of "lineæ albicantes" (a condition I have frequently observed in nulliparæ of an anemic or chlorotic tendency), in like manner may not the absorption of clot in the pile be followed by submucous cicatrization, involving the aforesaid peripheral nerve-endings, and inducing a condition of hyperesthesia, on the application of a stimulus, such as the presence of feces in the rectum? We should thus have an explanation of the "flattened tape-like" feces; for, with a desire to pass a motion, volition is called into play for the inhibition of the sphincter; this is modified by the inordinate reflex contractions, and the balance of power in the combat results in a narrowing of the orifice, and consequent moulding of the fecal matter. By dilating the parts we resort to a process of nerve stretching, releasing the peripheral nerve-endings from their constricting environments, thus rendering them less amenable to the action of a stimulus, and leaving the voluntary inhibition of the sphincter to assert its mastery.

Some Points in Surgical Practice and Surgical Anatomy.—At the first annual meeting of the Fifth District Branch, New York State Medical Association, held October 13, 1885, at Brooklyn, Prof. Pancoast was present by invitation and spoke on the following topics, as recorded by the Medical News:

The Antiphlogistic Touch of the Therapeutic Knife.—If he sees a patient early enough, this enables him to say with almost absolute certainty that there will be no abscess. Having exhibited the little knives which he is in the habit of using, he stated that the special excellence which characterizes them is, that they leave no scar. By means of one of these the part is punctured in numerous places, and the dead blood let out. The method is applicable to tumors of almost any sort, as it affords the best possible means in deep-seated bloodletting of the part. The moment a bubo, or other gathering, becomes hard and refuses to yield to the action of local applications, he freely punctures it with his little knife, and occasionally he finds that there is a drop of pus on the point. By this method he had even cured some cases of goitre, both cystic and fibroid, or at least rendered the growth so small that it gave no further trouble. He also gives internal remedies, however, such as Donovan's solution and iodide of potassium, with the addition of cinchona or whisky, if the patient's condition seems to demand it. Many other glandular growths can also be successfully treated in the same way.

The next point was one in connection with the surgical anatomy of the face, viz.:

The Special Value of the Malar Bone, which is often overlooked by surgeons. It is one of the hardest bones in the whole skull,

and it therefore serves as a great protection; while if it can be saved much deformity of the face is prevented. In excision of the superior maxilla, consequently, he always makes it a point to leave this bone in position; and he then proceeded to describe the operation which he had devised for this purpose. This consisted in a double-curved incision; and, after turning back the soft parts, in inserting a chain saw through the spheno-maxillary fissure, and so cutting through the articulation of the superior maxillary with the malar bone. In this connection he related the case of a lady with a rapidly growing carcinoma of the face, upon whom he performed this operation, notwithstanding the fact that she was five months pregnant. In ten days she had recovered from the operation, and she afterwards went on to full term without any further trouble. The value of the malar bone bone in protecting the brain from injury was well illustrated in the case of a boy, from whose face he extracted the breech-pin of a gun which had been embedded in it, without any one's knowledge, for eleven months. The gun had exploded in his hands, knocking the boy senseless, and the breech-pin had buried itself so completely in the tissues that it was not discovered by the physician who attended him. This case taught us that under such circumstances we should always examine carefully for powder in the skin, and also make sure that some part of the gun has not been imbedded in the face. Although this would seem like a very extraordinary case, it was not unique; similar ones having been reported by the late Dr. John R. Barton, and by a surgeon to one of the ophthalmic hospitals.

Dr. Pancoast next made a report of his

Treatment of Varicocele, which he said he has now successfully practiced in over 400 cases since the year 1856. It is very simple, and therefore in marked contrast to that so much in vogue in New York, and advocated particularly by Dr. Henry, which involves cutting away a portion of the scrotum. He did not think the latter a philosophical procedure, because it simply shortens the bag in which the enlarged veins are contained, and this can be more efficiently done by suspending them in a muslin bag, because the latter is indistensible, while the shortened scrotum, consisting of elastic tissues, gradually stretches es more and more, so that the trouble eventually returns. This procedure does not, therefore, go to the root of the evil. Still more complicated and serious is the operation described by Mr. Lee, in the Lancet of April 18, 1885, in which he cuts open the scrotum and lifts out the veins of the spermatic cord. In both these operations there is no little danger of erysipelas setting in. In his own operation the patient is cured in three or four days, instead of as many weeks. It consists of transfixing the scrotum with a sail-maker's needle (which has a good point, but no sharp edges), and passing between the vas deferens and the veins a strong silk ligature, which, having been carried around the veins, is then brought out at the point of insertion. The ends of the ligature are then tightly secured over a button of German silver or zinc, and the veins being thus strangulated, the ulcerative process goes on rapidly. In

Stricture of the Urethra he has never yet failed to get into the bladder with the instrument which he had modeled after that of Dr. Syme. After passing the filiform bougie through the staff, the latter is pushed up to the point of stricture, which is then cut superficially at a variety of points. The urethrotome is so constructed that the knife can be made to cut as deeply or as superficially as desired. Afterwards steady and progressive dilatation is to be regularly practised, and this, he insisted, is the only method of successfully treating stricture. Dr. Pancoast also exhibited and explained the modus operandi of a very light catheter bougie, with olive-shaped extremity, which he has devised.

He next spoke of

The Advantages of Sutures of Pure Black Silk, and he said that he always keeps a variety of sizes on hand. The white silk commonly used is colored with lead, and is apt to be poisonous to the wound, but the black silk causes no suppuration. The sutures which he uses are antiseptic, being made of pure black

silk, which is dyed with iron. The latter circumstance, he thought, is of service in preventing erysipelas. The silk can be rendered more antiseptic by dipping it in carbolic acid or chloride of zinc, of which he has a very high opinion. It is the strongest ligature made, and at the same time the most delicate for plastic operations. He is also in the habit of using diachylon plaster made with black silk, and finds it extremely satisfactory.

Etiology of Goitre.—The British Medical Journal writes:

"During the past two years our knowledge of the functions of the thyroid gland has been materially increased. We have learned that the gland has an important influence on the whole economy, and that the suspension of its functions is followed by a peculiar form of degeneration, which shows itself by a variety of apparently dissimilar symptoms, the most conspicuous being a mucoid degeneration of the connective tissue, a condition of anemia, and a progressive mental hebetude. Dr. Thursfield has opportunely come forward with a thoughtful paper on the etiology of goitre in England, read before the Society of Medical Officers of Health. He has not, it is true, made as much use of recent observation and experiment as might have been anticipated, but he has succeeded in looking at the subject from a larger point of view than has usually been reached by writers on the subject.

Starting from the known fact that the thyroid is a highly expansible organ, liable to become larger under various physiological conditions, he has looked to the causes which might tend to perpetuate a state which in health is short and intermittent. First of these causes he places a diminished atmospheric pressure. In hilly districts, therefore, enlargement of the thyroid appears at an early age, and is, according to Dr. Thursfield, even more common below the age of puberty than above. At puberty the enlargement usually ceases, but occasionally it becomes more marked, whence has arisen the impression that the enlargement is connected with the first appearance of catamenia. Given, then, a tendency to enlargement of thyroid, owing to the low atmospheric pressure of hilly regions, he argues that the habit of carrying weights on the head strongly reinforces the tendency by interfering with the cerebral circulation. He confirms the statement that this practice, if it comes into operation about the age of puberty, leads to a greater prevalence of goitre in hilly regions; and that after its abandonment, goitre is less often met with. Dr. Thursfield is inclined to minimize the importance of drinking-water in the production of the disease. The extraordinary discrepancies brtween the various theories and statements have never been reconciled, and appear to show that the influence thus exerted is not great.

He supports the view that the injurious ingredient is iron, and argues that a long continued excessive ingestion of this food might, by throwing additional work on the thyroid, which has probably for one of its functions depuration of the blood, if not hematopoiesis, lead to hypertrophy of the gland. The most valuable part of the paper is the discussion of the influence of the habit of carrying weights on the head, and the facts adduced ought to be sufficient to give the theory a place in the text-books. Endemic goitre is believed to be diminishing, even in the districts of England where it was once most common. The habit of carrying water, baskets and bundles on the head was picturesque, but if its abandonment was followed by the disappearance of the hideous deformities which goitre used to produce, its abandonment will be a gain, even from an esthetic point of view."

Transplantation of Bone.—The Lancet writes:

"We learn from a lay contemporary that Prof. Bergmann, of the Ziegelstrasse Hospital, Berlin, has recently had a successful case of transplantation of bone in the human subject. The operation is not new to science, for Ollier, of Lyons, and others have shown that in the lower animals portions of bone

may be readily grafted on to a freshened surface. As in all other measures taken with a view to the restoration of lost tissues or members, the difficulty increases as the scale of development is ascended, or, in other words, the more highly organized and specialized the elements of a part the less is their tenacity of life. There is a certain amount of energy distributed in the body for growth, development and repair, with discharge of functional activity. At first sight it seems surprising that transplantation of bone has not been more extensively practised on the human subject. The explanation is simple and ready to hand. In cases of fracture, even with loss of substance from detachment of splinters, nature is full of resources for replacing the necessary material; and again, it is well known that the entire shaft of a long bone may be excised within a few days of its destruction by acute suppurative ostitis, and a new one be regenerated with tolerable certainty. It is not for such cases then that transplantation of bone is likely to be required; but in those more numerous instances where the osseous tissue is eaten away by insiduous disease. Unfortunately for the patient, the vitality of the surrounding bone is usually too low to warrant any great hope of the method of extrinsic repair now under consideration. In order that the graft may "take," a rapid vascularization of the callus is necessary, but in caries the organizing power, except in rare cases, is too feeble. Still, there is no telling what surgical science and art may eventually accomplish, and for that reason we look forward with curiosity and interest to the future records of bone-grafting.

Nitro-glycerine as a Substitute for Alcohol.—We read in the "Practitioner" that in the July number of the "Therapeutic Gazette," Dr. Joseph B. Burroughs, of Manchester, N. Y., recommends the employment of nitro-glycerine as a substitute for alcohol. He states that some time ago, whilst using nitro-glycerine in a case of agina pectoris, and watching its wonderful stimulating effect on the heart and blood-vessels, it occurred to him that it might be advantageously employed in many diseases in place of alcohol. At first he was unwilling to rely on it solely, but as he became more fully acquainted with its effects he began to realize that as a heart stimulant it is far superior to brandy. Alcohol in its effects on the system is classed with chloroform and ether. All three produce first a period of excitement, followed by unconsciousness. In the case of chloroform the second stage is quickly reached, so that they are readily available as anesthetics. With alcohol the first stage is of longer duration, the secondary effect not being apparent unless large quantities are taken, so that it is generally employed as a stimulant to the heart and circulation. Nitro-glycerine, possessing this stimulating effect in a pre-eminent degree, may be given with confidence whenever the administration of brandy is indicated. Its advantages are, in the first place, that a very small quantity is required, one or two drops of the 1 per cent. solution being equivalent to one ounce or more of brandy; secondly, that it is tasteless, colorles, and practically odorless; thirdly, that it acts immediately and without any appreciable interval; and, finally that it is not likely to induce a craving for alcoholic stimulants. An extensive experience has shown that it is of great value in the shock resulting from accidents, in the nausea and faintness following surgical operations, in the failure of the heart's action due to the administration of chloroform, in opium poisoning, in asthma, hysterical aphonia, and the collapse of typhoid and other fevers. Dr. Burroughs gives a detailed account of a number of cases in which he has employed it in the manner indicated. The suggestion is a good one, and will probably be extensively adopted.

—Oil of turpentine is achieving quite a reputation in Germany for the cure of diphtheria. Dose to children is a teaspoonful, and to adults a tablespoonful, given morning and evening in warm milk. It is reported to have cured the disease in twenty-four hours.—Med. Bul.

CONTRIBUTION.

DIFFICULTIES ATTENDING THE DIAGNOSIS AND TREATMENT OF HIP-JOINT DISLOCATIONS WHEN ASSOCIATED WITH FRACTURE OF THE FEMUR—WITH A CASE.

BY N. F. SCHWARTZ, CANAL DOVER, O.

Read at the Mississippi Valley Med. Society.

To acknowledge having overlooked a dislocated hip, even though associated with fracture of the femur in some of its parts, may seem to those never having had any experience with this formidable association of injuries as unpardonable stupidity; and this feeling is intensified when the abundant literature upon hip-joint dislocations is examined, and the various tests and unmistakable signs of dislocation are pointed out, or the pelvis is taken up, and its rugged outlines, its spines and projections are observed. The question still grows, how can an ordinarily intelligent surgeon fail to recognize a displaced hip under any and all circumstances?

Nothing short of actual experience, purchased at the risk of the patient's weal and his own reputation, can drive a man to a careful study and a comprehension of the possibility of such almost irretrievable error, and the utter powerlessness of tongue and pen to describe the embarrassment and chagrin felt by the surgeon when this oversight is thrust upon him at a time when too late to correct, and when most unlooked for. Apropos, I will here present my simple, though, to me, all-sufficient experience with this dual injury, which has impressed upon me in indelible characters the proverb, "Let him that standeth take heed lest he fall."

Case. Jan. 13, 1882, Anton W., a large muscular German, aged 32 years, fell from a door in a glass-house to the street, a distance of sixteen feet, alighting on his head and left shoulder, rendering him for a time unconscious. He was conveyed to his home by his fellow-workmen, and in little more than an hour after sustaining the injuries I saw him. He had by this time fully regained consciousness, and was complaining much of pain in shoulder and scalp wound over left parietal eminence, from which there had been considerable hemorrhage before my arrival. This was promptly dressed, and I then proceeded to examine the shoulder, where, judging from the patient's complaints, I expected to find the greatest injury, but on careful examination found that the only injury to this region consisted in a contusion over acromial region of left scapula. For the purpose of making a thorough inspection of the topography of his person, I ordered removed all his garments, and while removing his pantaloons, he for the first time complained of pain in the lower extremities and at point which subsequently proved the seat of fracture.

On exposure of extremities the presence of a fracture of left femur was apparent to the most ordinary observer, and an examination showed the fracture through upper third. The dissymmetry was something remarkable, and once seen cannot readily be forgotten, and points almost unerringly to associated hip-joint dislocation. What, then, were the points of interest? The proximal fragment was drawn upwards and inwards to an extent never before witnessed, and offered an uncommon degree of resistance when an attempt was made to bring it in line with distal fragment. This fragment, distal, was drawn upwards and outwards, with adduction, thus causing great separation of fragments, shortening almost two inches. On most careful inspection there was not visible any evidence of violent contact on any part of fractured limb, leaving only excessive muscular action as the vulnerating force. Here my examination rested, never for one moment suspecting an injury beyond the fracture.

The fracture was dressed a la Gurdon Buck, but after extension and counter-extension was applied, the proximal fragment persisted in drawing out of line upwards. This was corrected by securing the limbs with sand-bags, lateral and anterior over proximal fragment. This done, the patient expressed himself as comfortable, and I left him after ordering morph. sulph. grs. one-fourth pro re nata. On the 14th I visited him again; he was comfortable as could be hoped for under the circumstances; he had need for the anodyne three times, but for pain in head and shoulder; there had been no pain at point of fracture, and there was but little swelling. I held him under daily surveillance, but nothing noteworthy occurred until Feb. 22, the thirty-ninth day after receipt of injury. It being observed as a holiday, a delegation of his countrymen called upon him to "drink his health," who, after quite fully carrying out this mission, considered their duty unfinished unless the seat of injury was inspected, which they proceeded to do, by removing all the investments of the injured limb, completely exposing it, and after an ocular inspection by all of the injured region they unanimously concluded that there was "etwas nicht recht

A committee was promptly dispatched to my office to acquaint me with their discovery, and to request my immediate presence, to which I promptly responded.

On my arrival I found a pandemonium, indeed. The patient was no longer cheerful and hopeful, but was much depressed in spirits, and loudly lamenting his misfortune.

The wife and children were in tears, and their only prospect was poverty and hardship. And the aged mother seemed totally crushed under the weight of this sudden disappointment, and sat speechless by the bedside of her only and unfortunate son.

But why this turmoil? On examination of the now, for the first time, since injured, completely exposed extremity, I found such a mass of provisional callus as I had never before nor since seen. In size and shape like a large cocoanut; and as the muscular structures of the injured region were much attenuated, the contour of the callus mass could be plainly outlined by the casual observer.

To the touch it was firm, and painless on pressure; mensuration proved extremities of equal length. Having satisfied myself that the cause of their alarm was a misconstruction placed upon the presence of a natural product, which, thrown out in necessary abundance to close a breach caused by my mistaken, though at the time unsuspected, surgery, I proceeded to quiet the tumult. Their officiousness was measured in a diction more forcible than eloquent, at least sufficiently forcible to render error on the side of ambiguity very improbable, in which, I have reason to believe, I succeeded.

To secure against further meddlesome friendship, I determined to encase the thigh in a Paris plaster dressing, which, with the assistance of Dr. J. D. Criss, I secured on the morning of Feb. 23, a la Bavaria. He was now permitted to sit up in a chair, but to put no weight on injured extremity. This dressing was allowed to remain until March 30, having in the meantime, on several occasions, inspected the limb.

The amount of provisional callus remained unchanged; indeed, it seemed more permanent than before, due, perhaps, to the muscular atrophy brought about by the long continued, absolute repose.

On the seventy-fifth day after injury I removed the plaster cast, having prepared a heavy leather casing for the thigh, and after applying this permitted him to bear some weight on fractured leg, but before so doing I carefully measured both extremities and compared them as to length, finding them equal; this result gave me reason to believe I had attained an extraordinary result, having secured union of a fractured femur without shortening. This very flattering prospect was, however, of short duration, and only caused the disappointment which awaited me to be more crushing. It soon came, for as soon as he put weight on injured leg there was a perceptible shortening. Not being able to account for this sudden contradiction of facts, I carefully inspected the injured region, and as the gluteal muscles were much atrophied, I soon discovered the magnitude of the mistake. To me it was appalling. I was paralyzed! But the fact that there was a dislocation on the dorsum ilii was plainly recognizable, and of course had been during the whole seventy-five days of my daily attendance, and during which time there had never been one complaint directing my attention to the hip. Fortunately for me, the patient and his friends seemed in a most happy mood, and I was being congratulated for the very excellent result attained. During all this time the extent of my perplexities seemed limitless. The question that perplexed me most was: shall I now, when too late to correct the error, apprise him of the truth, or shall I withhold the unwholesome knowledge from him, leaving him to exemplify the adage "Where ignorance is bliss, 'tis folly to be wise?" I chose the latter, and he remained in blissful ignorance of his condition, satisfied with the result.

He continued to use his leg daily by the aid of a crutch and a cane, and in May following they removed from the city, I not seeing him again until Jan. 2, 1884, nearly two years after the injury was sustained, when he called to see me, holding me in grateful remembrance for the excellent services rendered him and well satisfied with the result. He told me he had almost uninterruptedly pursued his vocation, glass engraving, since his departure, and experienced but little inconvenience from the shortening, which then amounted to $1\frac{1}{8}$ inches.

He wears a cork sole on shoe and walks well without a cane.

This minmium shortening, nearly twoyears after the injury, is a very remarkable feature in the case. But, the dislocation was evidently below the tendon of the obturator internus, and the head of the bone held in close proximity to the socket by the powerful action of the ilio-femoral ligament being wound around the neck of the femur, as took place when the proximal fragment was brought down from its high and adducted position assumed during dislocation.

Whereas, had the dislocation been an or-

dinary dislocation upon the dorsum ilii above the tendon of the obturatur internus, the shortening in this time might have been three or more inches, as in the case of Wm. W., reported by Dr. Oscar H. Allis, Pennsylvania Trans. vol XII, where the shortening, seven weeks after his discharge from the hospital, was three inches, though extremities, when he left the hospital, were of equal length. The associated fracture in this case was at junction of lower with middle third resulting in good union. In extenuation of this oversight of mine I have looked about me for reasons, and not in vain; there are reasons which address themselves in justification of this mistake of mine, with unmistakable cogency.

First. Its acknowledged infrequency. Though surgical literature teems with discourses on dislocations of the hip, their signs, tests and methods of reduction, but little space is devoted to this injury and fracture of the femur in association. Some authors pass it without even a passing mention of its possibility, while again, others refer to it as a possible surgical contingency, i. e., Gross, System Surg. vol. II page 107, speaks of this complication as very uncommon but adds nothing which, when occurring, would lead the surgeon to more surely recognize it, but adds: "It is of interest chiefly with reference to its restoration." We admit this interest, but preceding its restoration is the necessity of its recognition, and in a complication of such magnitude as a dislocated hip and fracture of the femur there must be present some confusion of symptoms, so much as to cause the symptoms of fracture to overshadow the common signs of hip dislocations to such an extent as to throw the surgeon off his guard and wholly overlook it, and I have reason to believe that this complication occurs more frequently than the literature upon the subject indicates.

Second, the magnitude of the injuries associated is an extenuating circumstance. Fracture of the femur alone is a great injury, a posteriori sufficient effect for the cause, and enough to absorb the surgeon's attention, and more particularly so when the patient makes no complaint directing his attention to the hip, as in the case of Anton W., where at no time did the patient utter any complaint directing my attention beyond the fracture.

The third article in extenuation of my mistake, and one that has afforded me much consolation in my humiliation, is that surgeons of eminent qualification and large experience have jointly and severally made the same oversight, and under circumstances no more misleading than in my case. Admitting, however, that all these reasons made my oversight none the less a mistake, it establishes one important fact, viz., that the common signs of hip joint dislocation are so modified by the presence of the fracture as to render the recognition a very difficult matter. This is the more especially the case when the fracture is contiguous to the joint and in a muscular subject, as in the case of Anton W. Dr. Packard, Pennsylvania Trans., vol. XII, says: "Diagnosis of injuries to the hip, though ordinarily easy, may again be so modified or masked as to render their recognition a matter attended with much difficulty," and refers to an instance where a patient was twice examined under ether, treated for simple fracture of the neck of the femur, and dismissed from the hospital with the head of the femur on the dorsum ilii, where of course it had been all the time. This occurred in the Pennsylvania Hospital, possessing all the facilities for diagnosis, and a staff whose ability and judgment places them beyond question.

Dr. J. B. Murdoch, Penn. Trans., Vol xi, gives an interesting report of a case occurring in his service as surgeon to "West Pennsylvania" Hospital. A brakeman sustained injuries for which he was sent to said hospital, was examined by Dr. Murdoch and colleagues, and put under treatment for fracture of the femur in upper third, as also some minor injuries to foot. There exists no question as to its proper treatment, but at the end of two months no union had taken place; the limb then encased in a Paris plaster dressing and allowed to remain for three more months, remaining all this time in the recumbent posture. Now, five months after receiving the injury, his limb was encased in a leather dressing and the patient permitted to go about on crutches, still no union had taken place.

For eight months he migrated from surgeon to surgeon, seeking further advice, but he was advised to return and submit to resection as the only means of securing union of the fragments.

To this he submitted at the hands of Dr. James McCann, surgeon on the same staff that had counseled Dr. Murdoch in his course, which resulted so unfortunately.

The operation was done, and that it was well done there remains no doubt.

The patient survived the operation but eight days, when he died.

At the autopsy there was revealed the true character of the primary injury.

The head of the femur was found displaced and resting on the tuber ischii, where no doubt it had been since he sustained the

fracture more than one year previous, and had escaped detection even though examined by a score or more of practical surgeons.

Other cases are on record where surgeons of high attainments and large experience have made similar oversights, but I deem their mention unnecessary. The two cases narrated are sufficient to establish the easy possibility to error, when confronted by these two great injuries in association.

It certainly is an unpleasant task to lay before the profession a grave mistake committed by a practitioner in any department of practice. There are always persons whose imperial reach of wisdom places them beyond the remotest possibility to err, and are ready to criticize most unsparingly anything but brilliant successes, such as they alone are capable of.

Though unpleasant, it is none the less a duty we owe the profession to record mistakes when committed under embarrassing circumstances, that, like danger signals along a dangerous coast, cause those seeing them to carefully sound every bearing until they anchor safely at a correct diagnosis.

In order to more certainly attain this much desired consummation, the symptoms presented in this complication and at variance with the common signs of fracture of the femur should be carefully borne in mind, which, when observed, will lead the surgeon to suspect associated dislocation of the hip. In the presence of a fractured femur, in a person in the prime of life, the surgeon should bear in mind the following well established propositions:

1. Any force capable of fracturing the femur may have first dislocated the hip.

2. When these injuries occur in association, they are independent as far as their occurrence is concerned, they never occur simultaneously. First the dislocation then the fracture, either by a consecutive force or a continuous unspent force.

The well-known want of elasticity in the bones of old persons renders dislocation in aged persons very improbable, and accounts for the greater frequency of fractures of the neck of the femur in persons beyond the prime of life.

The conditions of diagnostic value are: 1, the unusual dissymmetry. 2, the position of the proximal fragment.

Dr. Murdoch was struck by the uncommon appearance of the injured region, and remarks: "The upper fragment was drawn upwards and inwards, and could be distinctly felt about two inches below Poupart's Ligament, etc." In the case of Anton W., the first symptom to attract my attention was the very unusal appearance of the injured region, caused by the great separation of the fragments, and on examination I found the proximal fragment drawn upwards and inwards to an unusual extent, and offered much resistance when attempting to bring it in proper line with distal fragment.

These points, observed at different times, in different persons, and in different dislocations—one being on the tuber ischii, the other on dorsum ilii. The vulnerating force was also different, the one was caused by a crushing railroad injury, the other by excessive muscular action, entitles them to much diagnostic significance, and, when seen, should lead the surgeon to suspect the presence of this complication, even in the absence of all other symptoms, whereupon a careful, painstaking examination should be made to either establish or exclude the presence of a dislocated hip. But, even though we have reasons to cherish this suspension, our embarrassment is but intensified, for how can we prove our suspicions in the presence of an injury rendering all tests for hip-joint dislocation valueless? The necessity for its prompt recognition, however, is imperative, the surgeon's own reputation and the patient's future usefulness demand a full comprehension of the injuries sustained.

If in my future experience I shall have cause to suspect presence of this complication of injuries, and all ordinary tests fail to satisfy me, I shall not hesitate to use the exploring needle until all doubts are dispelled, and the head of the femur is located within or without the socket. This cannot fail to lead to the certain recognition of this complication.

Having established the existence of this very grave complication, there is thrust upon the surgeon, ere he has had time to draw a sigh of relief, the necessity of its immediate restoration at all hazards. There is no middle ground in the matter of its restoration, and by this I mean that all measures not having for their ultimate object the immediate restoration and coaptation of all the parts out of harmony are unwarranted. The literature upon ancient hip joint dislocations, as to the possibility of their restoration even after a brief period, warrants conclusions overwhelmingly negative.

Thus there is not even a reasonable hope of successful reduction when the fragments are brought into coaptation assuming the position of the dislocation, of whatever kind, and delayed until union is sufficiently firm to offer the necessary resistance.

Hamilton, Fractures and Dislocations, 5th edition, says: "If efforts at reduction are deferred until union has taken place they will most probably prove futile."

Boyer (Holmes System, Vol. III, page 976) considers a dislocation of an orbicular joint when associated with fracture irreducible, and, if delayed until union has taken place, a matter of questionable expediency.

True, exceptions to this can be cited, but the surgeon has no method by which he can determine who will be the exception, and cannot, therefore, discriminate wisely, and should always turn his efforts in the direction of immediate reduction. Here presents the most perplexing problem. How can reduction of a hip joint dislocation be accomplished when associated with a fracture of the femur? When the fracture is low, as in lower third, or in lower part of middle third, the ordinary methods may be employed with reasonable promise of success. After first encasing the broken thigh in a substantial dressing, we here have left us the means with which to make circumduction and upon which to make extension. Not so when the fracture is high up; the difficulty increases as the proximal fragment shortens. The ordinary methods of reduction are here rendered impracticable. Gross, System Surgery, Vol. II., page 107, says, "reduction in these cases should always be made by manipulation, if possible." None will dispute the wisdom of this advice as modified by the concluding subjunctive. If possible. It is, however, somewhat difficult to conceive of the possibility of success by manipulation per se in a large muscular subject and a short upper fragment. Notwithstanding, however, the apparent impracticability of this method, it should be given an exhaustive trial. The head of the femur may be near the socket, and return thereto in response to our limited efforts. Having given every method ordinarily practiced an exhaustive trial under full anesthesia, and having failed to reduce the dislocation, the necessities of the occasion demand the employment of extraordinary means.

Dr. Oscar H. Allis, Pennsylvania Trans., vol. xii., suggests an awl, gimlet or strong cork-screw thrust into the great trochanter as a possible means to facilitate reduction. Dr. Edmund Andrews, of Chicago, International Encyclopedia Surgery, vol. iii., page 706, proposes the section, subcutaneously, of the outer wing of the ilio-femoral ligament to facilitate the reduction of an ancient hip dislocation or where the dislocation is accompanied with fracture of the femur. He further says: "Instead of section of the ligament an incision may be made below the trochanter down to the bone on its outer side and the shaft may be seized with lion-jawed forceps, while assistants hold the limb vertically, and make strong extension and so manipulate as to effect reduction, after which proper extension for the wound may be applied as usual. In spite of their severity these measures, in my opinion, are warranted by the extremity of the case."

These suggestions have hitherto been held sub judice by the profession; their practical value has in no instance been demonstrated. It remains but for some surgeon to take the initiative in the matter and demonstrate their practical utility.

If it should be my misfortune to be called to-morrow to reduce a dislocated hip complicated with fracture of the femur in upper third, and all ordinary methods of reduction failed me, I shall deem it my duty as a surgeon to reduce the dislocation immediately, and shall proceed to lay open the superstructure down to the bone, grasp the upper fragment and replace it in the socket, in which I shall expect the full support of the profession as to its expediency.

It is almost needless to say that in such a grave operation the most careful antiseptic precautions should be observed.[1]

The necessities of an immediate restoration of all the parts concerned in this union of injuries are sufficiently urgent to demand any means promising such an end. It should first be attempted without hazard; and in case of failure by this means the more hazardous measures should be carried to successful restoration of all the parts out of harmony, and I am convinced the end will justify the means.

Under no circumstances more than in the presence of these two grave injuries associated, is the surgeon placed more on the desensive, and the patient should be acquainted fully with the complicated nature of his injury and the necessity of prompt action to secure the future usefulness of the injured extremity, and the measures necessary to bring about the restoration. Should he hesi-

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1. Laparotomy for penetrating gunshot wounds of the abdomen stood for many years as an operation of questionable expediency, and even now after its demonstration as a life-saving operation in numerous occasions, some are ready to criticize the operation as too hazardous, and are willing to but smooth the dying pillows of their patients with large doses of opium and cold applications, etc. But I believe I am voicing the opinion of the advanced profession when I say that such a course now would be deemed bad surgery, and he that practiced it unworthy the name.

tate in submitting to the extreme means mentioned, and choose to risk the improbabilities of successful reduction after union of the fracture is secured, or allow the dislocation to go unreduced the remainder of his life? The surgeon should in every instance fortify himself with a written instrument signed by the patient and responsible witnesses divorcing himself from all responsibilities assumed by the patient, and contrary to the advice and best judgment given him; else, perchance, the patient, in a fit of remorse in after years, institutes proceedings at law for malpractice, forcing him into an annoying and expensive lawsuit, ending in a heavy verdict for damages against him, of which the average jury, in their ignorance and prejudice, regardless of the law, the facts and the evidence, are eminently capable.

CLINICAL LECTURES.

ON PHTHISIS PULMONALIS.

BY JAMES K. CROOK, M. D.

Instructor in Clinical Medicine at the New York Post-Graduate Medical School (Intermediate Term); Assistant Physician to the Out-Door Department of Bellevue Hospital.

Delivered at the Post-Graduate School during the summer session of 1885.

LECTURE III.

FIBROUS PHTHISIS (CHRONIC INTERSTITINAL PNEUMONIA).

We have this morning, gentlemen, a patient who has been attending the clinics at the Bellevue Dispensary and at the Post-Graduate School for more than a year past. She was shown to the class several times during the winter by Professor Burt. She is 30 years of age, a native of Philadelphia, and has been living for the past five years in New York; was married three years ago but has never been pregnant. Her father is living and in good health, but her mother died of consumption. The patient states that she has never been very strong, but does not know exactly when her trouble began. She has never had pneumonia or pleurisy, but has had rheumatism in nearly all of her joints. She has been coughing for about a year and a half or two years. For a long time the cough has been attended by a profuse, yellowish-greenish expectoration, which is at times very ill-smelling and offensive. She has had frequent slight attacks of hemoptysis. The menstrual flow began to be scanty about a year ago, and has not appeared at all for two months. Night sweats also trouble her occasionally and she has frequent spells of indigestion and diarrhea. She has a great repugnance for fats, but can take cod-liver oil by mixing it with a little brandy. She has marked and persistent dyspnea. Her temperature is now 97; it is nearly always lower than normal. Her pulse is 100 and her respirations are 28 to the minute. Her tongue is heavily furred and her breath is sour. She is not extremely emaciated and thinks she is nearly as strong as she ever was. She thinks that her illness originated as a result of exposure to cold, but she received a great set-back from nursing her aunt, who died of consumption a few weeks ago.

When we examine her chest we see at once that something is wrong. The left side seems to be almost motionless and to take little part in the respiratory movements. On mensuration I find the left side to measure almost one inch less than the right, from the median line of the sternum in front to the spines of the vertebræ behind. As the patient is right-handed we would naturally expect the right side to be a little greater in circumference, but not so much as this. The apex-beat of the heart is higher up and about an inch to the left of the normal situation, but the heart is not enlarged nor is there a murmur present. Palpation also demonstrates that the left side takes little part in the acts of respiration, but there seems to be no change in the vocal fremitus. On percussion I find a peculiar wooden resonance all over the left side; it is about midway between dull and flat. At several points over the left lung in front I am enabled, by making a sharp percussion blow, to bring out a peculiar clinking metallic sound known as the cracked-pot or cracked-metal resonance (bruitde pot fêlé). In order to accomplish it successfully, you must direct the patient to hold her mouth open and apply your ear quite close to it while percussing. It is quite distinct in this case and may be heard at some distance, especially when percussion is made during expiration. The "sense of resistance" is well marked all over the left lung. At some points it is very faint and almost suppressed; at others it is very loud and distinct. The breathing is cavernous at the upper part of the lung. In addition, I hear frequent mucous râles, and coarse grazing or crumpling sounds, which probably emanate from a roughened and thickened pleura. Those sounds are more distinct beneath and below the scapula. The voice sounds are variable, being heard

quite distinctly at some points and almost absent at others. In the right lung I find the breathing sounds exaggerated, but no indications of catarrh consolidation or cavities. This lung probably remains entirely free from phthisical invasion.

It is plain that we have here a grave case of advanced pulmonary disease. We may have no hesitation in making a diagnosis of chronic interstitial pneumonia or fibroid phthisis. This diagnosis is based on the profuse, offensive expectoration, the great dyspnea, the absence of high temperature or extensive emaciation, and the retraction and other physical signs on the affected side. Some of the symptoms are very similar to those of a prolonged attack of fetid bronchitis, but the physical signs at once exclude this affection. It might also be mistaken for an old pleurisy with retraction, but the absence of a history of pleuritic attack, the hemoptysis, profuse expectoration, and the presence of bronchial and cavernous breathing and cracked-pot resonance, militate against such a diagnosis per se. There is no doubt some thickening and roughening of the pleura of the affected side, but this is secondary to the pneumonic process. Interstitial pneumonia is an inflammatory process, which involves the fibrous framework of the lungs. It is usually secondary to some other process, as acute pneumonia, prolonged bronchitis, etc., and is more common in gouty or rheumatic persons than in others. Fibrous inflammation exists to a greater or less extent in all advanced cases of phthisis and is found in various stages of transition in post-mortem examinations of phthisical lungs. In some cases, however, interstitial inflammation precedes tubercular or catarrhal changes, and constitutes the principal part of the pathologgical process. As described by Professor Loomis, it is initiated by a multiplication of connective tissue elements in the pulmonary septa, which leads to progressive obliteration of the alveolar cavities and converts portions or the whole of the lung into callous, fibrous tissue. Fibrous bands are developed which extend through and through the pulmonary tissue in all directions, often being connected with the pleura, which eventually contract and cause great diminution in the size of the lung, thus very seriously modifying or completely annulling the function of the organ. Such an event has taken place in this case, as marked by the diminished size and absence of motion from the affected side.

The cavities which occur in this form of phthisis are not caused by the softening or breaking down of caseous products as in other forms of phthisis, but by dilatations of the bronchial tubes followed by ulceration of their mucous linings. These dilatations are formed as follows: The contraction of the new fibrous tissue in the lungs causes the bronchi to become constricted at certain points, leaving them somewhat bulged at others. The labored inspiratory efforts cause increased tension of the bulged portions of the tubes, which gradually give way, until, in some instances, considerable cavities, known as bronchiectases are formed. The cavernous breathing and cracked-pot resonance, which we find, would indicate that such an event has occurred in this patient's lungs. We would probably find cretaceous or cheesy and, perhaps, also, tubercular deposits in the diseased lung.

We cannot expect a recovery in this case. The lesions which have been formed do not admit of reparation, but the prognosis, so far as a continuance of life is concerned, is good. The processes which are established in this form of phthisis are usually very slow, and by judicious management this patient may be kept alive and enjoy a life of comparative comfort for a number of years. She must exercise great care, however, for she lives, as it were, under sufferance. Intercurrent diseases must be guarded against. An attack of acute pneumonia, for instance, on the unaffected side, would prove rapidly fatal. The sustaining measures to be observed are in no wise different from those mentioned in the preceding cases. But here we have the indication for cod-liver oil. The patient has been taking it off and on for a long time, and she informs us that she is always better and stronger when she keeps it up regularly. But there are many ways of prescribing this useful agent. Many patients will return, after having taken it a few days, with the information that the oil disagreed with them, made them sick at the stomach and that they could not take it. Such reports should not cause us to discontinue its use, as is so often done. The best preparation is Moeller's pale Norwegian oil, and the beginning dose should be a teaspoonful after each meal; it should be gradually increased until a tablespoonful is tolerated, which quantity will do as much for our patient as we may expect of cod-liver oil. This patient is now taking that quantity—although she has a very weak stomach—agitating it in a glass with an equal bulk of brandy. I have seldom found it to disagree when given in this way; besides both agents are usually indicated in consumption. If for any reason

brandy be objected to, the oil, may be given with about four times its bulk of lime water, or a few drops (five or six) of sulphuric ether may be added to each dose.

We would regulate this patient's digestion by means of Fowler's solution of arsenic, given in drop doses before meals. This preparation is a most excellent stomachic tonic, and is specially applicable to the indigestion of chronic wasting diseases. It should be discontinued as soon as the desired result has been attained. The patient states that her cough is very troublesome, that the expectoration is profuse and offensive, and that she suffers much from shortness of breath. Hence stimulating expectorants must be given her by all means to enable the patient to eliminate the superabundant secretion. Such a cough mixture as I advised for the preceding case would be harmful here, inasmuch as it would deaden the irritation caused by the exuded products in the bronchi and bronchiectatic cavities, allowing them to accumulate, and in this manner greatly increase the suffering from dyspnea. The preparations of ammonia are the most reliable stimulating expectorants. Ammonia is to a considerable extent eliminated by the lungs and, in thus escaping, it stimulates secretions, tones up the mucous membranes, and liquefies the products of inflammation, thus favoring their ready expulsion. As there is a good deal of adynamia in this case, I would choose the carbonate, as it is more stimulating than other preparations of ammonia. It may be given with eucalyptus, senega or other stimulating expectorants. A good combination is

℞	Ammon. carbonat. -	ʒij.
	Ext. eucalypt. fl. -	℥j.
	Ext. glycyrrhizae -	ʒij.
	Syr. prun. virginian. ad.	℥iv.

M. Dose. A teaspoonful every three or four hours.

In addition to the expectorant mixture, a vigorous friction of the chest with liniment of ammonia or turpentine at night before retiring would contribute greatly to relieve the shortness of breath and to promote the comfort of the patient. To overcome the fetor of the expectoration we should use antiseptic steam inhalations. This condition is due to the decomposition of muco-pus which accumulates in the bronchial dilatations. I have used such inhalations with gratifying results in the following manner, as recommended by Professor Roberts Bartholow: A small, wide-mouthed bottle, containing a moistened sponge, is placed in a vessel of steaming hot water up to the neck. A small quantity (15 to 20 minims) of the tincture of iodine is then dropped on the sponge, and the vapor of iodine inhaled as it rises with the vapor of water. One part of carbolic acid or creasote added to four parts of iodine will increase its efficiency. This inhalation may be repeated every morning on rising until relief is obtained.

Now I will add a word of caution. I have recommended several measures to be carried out in this case, and, as you have seen, there are conditions present which call for each one. Phthisis is a disease which, as it advances, gives rise to protean manifestations. Each case is apt to present special indications for treatment. But in managing your case do not overdose the patient. Too much medicine is worse than none at all. Give no drug unless you have good reasons for so doing, and observe, as far as possible, the effects of each one. A phthisical old woman came into the Bellevue dispensary a few days ago with nine bottles tied up in a bag, from each one of which, she stated that she was taking medicine for her lung trouble! Such cases furnish an ample clue to the mystery, why patients sometimes wax and grow fat, when they throw their medicines in the sink.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, Oct. 31, 1885. The President, Dr. Atwood, in the chair.

FRACTURE OF BASE OF SKULL—LACERATED CEREBELLUM—SPECIMEN.

Dr. Thornton stated that a German about 38 years old, who had previously suffered from supposed renal calculi, at 8 A. M., on August 23, walked off of a porch whilst drunk. When seen a bloody serum was escaping from the left ear and continued to do so. He was deaf on that side after the occurrence, but not on the right. The notes of the physician who attended him (Aug. 26) show that he found him in delirium, with violent pain in the back, and the right upper lid containing an extravasation. Aug. 27, 9 A. M—condition same; advised hospital, refused. Growing weaker and relapses into unconsciousness after being aroused. 11 P M.—Violent delirium, temperature high, wet pack followed by relief; discharge from ear profuse. Aug. 28—Died at 12:15. Dr. T. made the post-mortem, intending to make it complete. There was found a complete transverse fracture of each petrous bone internal to the inter-

nal auditory meatus and a horseshoe fracture of the occipital bone around the foramen magnum. Before the dura mater was lifted nothing could be seen. Upon tearing it up, the internal table of the occipital peeled off in flakes. A laceration was observed in the cerebellum. The man probably fell on his feet and the blood which came out of his ear was derived from the superior petrosal sinus.

AMPUTATION OF FOOT FOR CARIES.—SPECIMEN.

Dr. Thornton in presenting the specimen remarked that the foot was in such a condition that Chopart's operation was resorted to. At first there was necrosis of the second toe, which was amputated. The second metatarsal bone became necrosed and the physician who attended the case claimed to have removed it entirely. This appeared doubtful, and upon dissecting the specimen the head and base were found remaining. The necrosis extended to the bones articulating with the metatarsal, the three cuneiform bones, and necessitated an amputation. The speaker remarked in regard to the first case that it was remarkable that such an extensive fracture should go unperceived, that blood should only have escaped by one ear and no prominent symptoms appeared until the third day.

Dr. Williams stated that the escape by only one ear was probably due to the fact that only one membrana tympani was ruptured. Did the fracture follow the course of any sutures?

Dr. Thornton said that the fractures were across sutures. In regard to the foot he wished to say that no one metatarsal bone could do as much mischief as the second, as it rests on three cuneiform bones and two metatarsal and its synovial membrane involves more.

Dr. Bremer said that it was quite possible not to have any symptoms of the brain, as only a part of the cerebellum was involved. The coordinating centres have been generally located in the cerebellum; but, lately, Nothnagel has shown that they are in the vermicular process and not in the lobes. So that if the cerebellum or process is injured debility of muscular power follows, the function of the coordinating centres being to give strength to movements originating in the motor area. There was no pressure on the brain in this case on account of the outlet for the hemorrhage, and hence the man did not have symptoms immediately.

Vaccine Virus.—Vaccination.—Humanized Virus.

Dr. Loftus wished to ask the members what experience they had had with the quills furnished by the Board of Health. In his experience they had been very unsatisfactory. He had seen some children who had been vaccinated in the public schools and no scars remained; also one, who, after being vaccinated at school, contracted small-pox. He had seen fungous growths follow this vaccination, or scars that did not resemble vaccine scars, or in apparently proper cases the scars disappeared in two or three years.

Dr. Ohmann Dumesnil said that the virus furnished by the Board of Health had been always successful in his hands. He was very careful in vaccinating to remove only the epidermis down to the papillæ of the corium, to rub the virus in thoroughly and to see that it was dry before clothing was resumed. In regard to scars disappearing, it sometimes happened that superficial cicatrices would apparently disappear, a closer examination showing them to be still present.

Dr. Loftus said that a number of physicians had had his experience, and when he complained to the Board he was answered that Higgins' virus was giving satisfaction. He thought the subject an important one and would like to know where he could get reliable virus. He had tried ivory points with about the same success.

Dr. Hendrix also thought this an important subject, and if the virus we get is not good we ought to know it. He had the same experience as the last speaker. He had used Martin's and it was as bad as Higgins', and he thought that the quills were not sufficiently charged.

Dr. Love had used Martin's and Fond du Lac points with good results. They are all double dipped and warranted.

Dr. Lee thought the smallest particle of virus was sufficient. At the children's clinic of the Missouri Medical College one-eighth of a quill was used, and 500 cases so vaccinated with Board of Health quills were almost uniformly successful.

Dr. Pollak thought humanized virus more reliable. He had failed signally on many occasions with bovine virus.

Dr. Jordan stated that he had vaccinated thousands before the introduction of points and quills, and humanized virus was much more satisfactory. On one occasion he vaccinated 312 children with half of a scale. On using quills he was surprised to see the raspberry appearance on so many. He thought that the reason quills are not reliable is because the virus is not taken at the proper time.

Dr. Love thought that if bovine virus is pure and fresh, it is as good if not better than

humanized virus. And, in point of fact, humanized virus was originally derived from the bovine. He certainly objected to humanized virus. He had treated five children in as many families, all apparently in the best of health, and yet they had hereditary syphilis. There is a decided risk of transmitting syphilis through humanized virus.

Dr. Pollak had no objection to bovine virus if it was pure and obtained at the proper time.

Dr. Bremer thought the ideal way of vaccinating is directly from the heifer, as it is done in the hospitals of Paris. It would be a good plan for the Board of Health to furnish heifers at different points in the city and vaccinate from them.

Dr. Shaw had considerable experience with humanized and bovine virus. He had vaccinated 10,000 in the last fifteen years. He had no doubt that humanized virus was more effective, but he attributed this to the fact that it is a step nearer humanity. Still he did not advocate it; in fact, he dreaded it, as it might transmit not only syphilis but other diseases. His experience with bovine virus was failure in about fifty per cent of the cases. He thought that this was a very important subject, as we might expect small-pox here this year.

Upon his motion a committee of five was appointed to investigate the subject and report upon it. The committee consists of Drs. Bremer, Shaw, Loftus, Love and Jordan.

CORRESPONDENCE.

NEW YORK LETTER.

New York, November 1, 1885.

Editor Review: At the last stated meeting of the New York County Medical Association a paper was read by Dr. Frederick S. Dennis, Professor of Surgery in the Bellevue Medical College, on "Fracture of the Patella." Several illustrative cases were presented. Dr. Herman Biggs, instructor in the Carnegie Laboratory (where the meetings are held) gave a demonstration of the micro-organisms of osteo-myelitis. Though this laboratory has been in operation only a few months, it has already performed much valuable service in the study of pathology. At one of his recent lectures Dr. Dennis announced that Carnegie, the founder of the laboratory, had placed in his hands the interest of one hundred thousand dollars for the purchase of apparatus and authorized him to call for more money should it be needed to thoroughly equip the building. Mr. Carnegie's example is a most illustrious one, which more of our wealthy men should follow.

At the last meeting of the County Medical Society those officers were elected who were mentioned in my previous letter. Considerable discussion was held concerning proposed amendments to the constitution. The present membership of the society is about eight hundred. The Treasurer's report showed a balance on hand of about four hundred and fifty dollars. It is probable that the society will publish a medical directory of this city and vicinity. Much dissatisfaction was expressed with the present publication of the Medico-Historical Society. Many inaccuracies were claimed to exist in it, and it was further said that the names of reputable physicians were often omitted from it on account of personal feelings on the part of the editors. It is an expensive volume to publish and is the only thing of the kind we now have.

At a recent meeting of the New York Surgical Society a paper was read by Dr. Lewis S. Pilcher, of Brooklyn, on "Prophylactic Arterial Ligature."

The Board of Heath have anticipated the possible invasion of small-pox by the appointment of ten more vaccinators for temporary service. A house-to-house inspection is now being made throughout the entire city. Twenty new men have also been added to the corps of Sanitary Engineers. With this increase of vigilance it is believed that the city will enjoy a healthy winter. Large quantities of vaccine virus are being sent to all parts of the country, as many as three thousand points being sent off in a single day.

A plastic operation of interest was recently performed by Dr. W. T. Bull, Surgeon to Chambers Street and New York Hospital. The patient, a child of six years, had congenital nevus on the tip of the nose, for the relief of which the family physician had injected pure carbolic acid with the result of causing the soft tissues to slough away from the end of the nose—half way toward the root. The alæ and septum remained. Dr. Bull freshened the edges of the alæ and the anterior aspect of the septum. Commencing at a point one-third of an inch below the inner angle of the orbit and without the median line, an incision was made downwards and outwards, to a point above the outer angle of the mouth on a line with the anterior nares. Another parallel incision was made of the same length, but half an inch without the former. Both were connected by a longitudinal incision at their base. This flap was dissected up, the procedure being followed on both sides. These two flaps were approximated by their inner margins in the median line and below fastened to the septum,

whilst their outer edges were sutured to the corresponding edges of the alæ. Thus the nose was well covered. The edges of the wound left on either side by the removal of the flap were then brought together by fine sutures. The entire operation was done under strict antisepsis and great care exercised in all its details. This method of operating left, in the opinion of Dr. Bull, more sightly cicatrices than would have resulted from the old method of taking the flap from the forehead.

The Ninth Annual Session of the American Academy of Medicine has recently been held in this city, the President, Dr. A. L. Gihon, U. S. N., presiding. The President's address bore the title: "What is Medicine?" He deplored the lack of classical education among American physicians. Such an education was necessary according to the constitution of the Academy to become a member thereof. He gave a history of the work that the society has done and of what it is trying to do in the way of raising the profession. At subsequent sessions papers of a more technical character were read. A committee was appointed to report annually on the requirements of the preliminary examination in the medical colleges in the United States and Canada, and another committee to report on the best preliminary education for young men who wish to enter upon the study of medicine; also as to the exact minimum which medical schools should require. Dr. R. S. Sutton, of Pittsburg, was elected President for the ensuing year, and Dr. Richard J. Dunglison, of Philadelphia, Secretary and Treasurer. The Academy adjourned to hold its next annual session in Pittsburg.

J. E. N.

ITEMS.

—Concerning Cliques.—We recently encountered an old practitioner whose memory extended over a sufficient period of observation of the medical world of New York to give his words an authority worthy of recognition. He thus discoursed concerning cliques: "New York, in the early days, was under the all-powerful sway of the New York Hospital Clique, centering about the old Barclay Street Medical College. This clique was law and gospel to the profession. It held a mighty power. The ins had everything, the outs nothing. But, as is often the case, some of the profession grew restive under the somewhat arbitrary control then exercised, and questions as to right and patronage arose. The result was the overthrow of the New York Hospital Clique, and the establishment of the clique which represented the College of Physicians and Surgeons. The Kappa Lambda Society was formed about this time. Its object was to restrict patronage in consultations and professional associations to its members. Most of the members belonged to the 'old college,' and for a time controlled the business of the then young city. It was easy for them to say that all others were wanting in respectability and standing, and there was no appeal. This sway in time gave way to the clique at the University, under the control of Dr. Valentine Mott, who stood at the head of the profession, and was the leading surgeon, not only of New York, but of the country. No one man has been able to occupy his place since. Time went on, and three powerful cliques represented the former power which was swayed by one. They were named respectively after the three colleges around which they centered, that of the Physicians and Surgeons, the University, and Bellevue. The reign of cliques is over—New York has become too large for them. Their empire, like that of the old Roman, has gone to pieces by its own weight. To-day there are feeble attempts at cliquism. Ambition is ever ready to grasp at the control and supremacy represented by them, but it cannot be said that the medical profession to-day is under the dominance of one man or set of men holding in their hands the power of life and death. Le roi est mort; but now no one shouts vive le roi. A republic has succeeded, based on the suffrage of the people. No one man in New York is accorded the title of The Surgeon, or The Physician; the question is no longer asked in the singular; if it is, it is always answered in the plural. The leading medical societies give every member a chance to give his experience, the leading medical journals print his articles if they are worthy of it, and the field is quite open to new-comers. It is not in the spirit of the age to tolerate cliques in professional circles, whatever may be the case in social, and it must be considered as a sign of a greater breadth of culture—a broadening of the phylacteries of knowledge. It is true, the colleges are still family stock concerns, but the next generation may change even this. Fairness and truth generally triumph in the long run. But I may tell you more about the colleges at another time."—New York Med. Record.

—Life says that at last we know why "uneasy lies the head that wears a crown." A newly-arrived chiropodist from the old country announces himself as late corn-doctor to the Court of Germany, and tells us he has removed corns from several of the crowned heads of Europe.

—The Linton District Medical Society meets November 10, at Mexico, Mo.

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CONTAGIOUS INFECTION IN SURGERY.

At the present day when the medico-chirurgical mind of any training whatsoever admits without gainsaying the value and importance of cleanliness in all surgical manipulation, it is imperative that we inform ourselves just what measures are needed to insure immunity from contagion by the ministering hand and instruments.

The favorable results attained in operative surgery subsequent to the employment of the several disinfectants, of greater or lesser concentration and power, and of late years even without any such, led Kuemmell, of Hamburg, to enter upon a study of the precautions that must be observed. He presented his results to the Fourteenth Congress of German Surgeons in April, 1885.

The questions that presented themselves to Kuemmel were:

1. Is it at all necessary to employ the more or less toxic antiseptics in order to achieve a complete disinfection?

2. Are the antiseptics in themselves the active factors in surgical success?

3. Have we an antiseptic whose action is really prompt and positive?

4. What role does the atmosphere play in the infection of wounds?

These and similar problems Kuemmel endeavored to solve by experimental study.

According to the reporter, two modes exist by which a wound may be endangered; either through direct contact of the wound with infected hands, instruments, sponges, etc., or through the intermediate agency of the air.

Let us to-day consider the infection by direct contact.

The author in his research aimed to preserve the conditions that really obtain in practical surgery. He, therefore, did not determine the relation of the several disinfectants to the pure cultivations of the whole known series of micro-organisms, but confines himself to those organisms that the practitioner runs across each day, such as the microbes of putrefaction, of phlegmonous processes, of diphtheria, etc.

His investigations were so conducted that the objects to be examined, the hands, instruments, sponges, shreds of tissue and fluids from the wound were brought into contact with the nutritive soil employed by Koch.

The antiseptic, or the mode of disinfection used upon these objects, was only then considered a perfect success if no development of any organisms, indifferent or pathogenic, took place.

It was found that highly polished, new instruments were not disinfected by an immersion for two minutes in a five per cent solution of carbolic acid. An exposure for ten minutes to a five or a three per cent solution was found to suffice for the prevention of any development in the nutritrive media.

Submersion for even fifteen minutes in a sublimate solution, 1:1000, did not disinfect; neither exposure to peroxide of hydrogen, turpentine or ol. sinapis, 1:500.

Instruments that had already been used, although carefully cleansed in accordance with the usual method, demanded a longer period of exposure. Instruments that had been used in autopsies were not clean after fifteen minutes dipping in five per cent carbolic solution or 1:1000 sublimate solution.

At any rate abundant proliferation of bacteria ensued along the line of incision or scratching on the gelatine cake.

Kuemmell has found, as others before him, that instruments with uneven surfaces are

more difficult of disinfection than perfectly smooth ones.

A rapid and thorough disinfection is possible only after such preparation of the instruments that the disinfectant can most favorably act upon the metallic surfaces. This preparation, according to Kuemmel, consists in a thorough washing and brushing with warm water and a potash soap—schmierseife, sapo viridis. New instruments that were so scrubbed did not develop colonies, though no further exposure to an antiseptic solution was practiced.

Instruments that had been used in post-mortems were rendered thoroughly aseptic after the above process of soap-washing, by submersion for one minute in carbolic acid, or sublimate solution, or chlorinated water.

As for sponges, at the present most distrusted for surgical use, K. says that the most foul, that are saturated with blood and filth from cadavers, or have been used in operations upon phlegmonous or diphtheritic patients, can be rendered pure by a good washing in green soap and dipping thereafter for one to two minutes into a five per cent solution of carbolic acid, or a 1 : 1000 corrosive sublimate solution, or into chlorinated water. Without the previous soap washing soaking for a half hour in any of these solutions does not suffice to sterilize the sponges. Compresses, bandages, etc., can be perfectly sterilized by washing with the green soap and subsequently saturating with the above mentioned disinfectant solutions.

Surgeons' silk should be kept permanently in a 1 : 1000 sublimate solution. Catgut may be sterilized by soaking for twelve hours in sublimate, 1 : 1000, and preserving in alcohol and glycerine.

A chief interest is elicited by the discussion of the purification of the hands. This can be accomplished rapidly and surely, even if infectious matters have been handled; however, great care and circumspection must be exercised.

Kuemmel reports as follows:

I. After an autopsy he brushed his hands again and again with ordinary soap and water. The depressions and scratches made upon the gelatine swarmed in several days with micro-organic development.

II. After an autopsy of a case of puerperal peritonitis, he washed his hands carefully with ordinary soap and water, with five per cent carbolic acid, and with chlorinated water. The result upon contact with the gelatine was the development of numerous colonies after a few days.

III. The same result ensued after employing sublimate, 1:1000, on the third day.

IV. After brushing the hands, so infected, with green soap and warm water and subsequently carefully washing in solutions of boric acid, salicylic acid, thymol or sublimate, 1:1000, colonies developed on the gelatine on the 5-7 day. If, after the green soap treatment carbolic acid in a five per cent solution is used, no result follows the dipping of the fingers into gelatine.

The practical application of Kuemmel's experiments lies in this: that more stress should be laid on the employment in first order of soap, green soap preferably, water and nail-brush, and that the antiseptics are of especial value only in second order to keep purified objects in the sterilized state

Although five per cent carbolic acid solution, and probably chlorinated water are the most powerful germicides, according to these studies, still sublimate in the strength given is of value on account of its non-irritable, non-odorous qualities.

Instruments then should be as smooth and simple as possible and are to be cleansed first with green soap, then placed in a 3-5 per cent carbolic solution. Sponges must be rendered innocuous by washing in green soap and preserving them in sublimate. The hands should be several times brushed with water and green soap and then thoroughly washed and brushed with a five per cent solution of carbolic acid.

Direct Interstitial Medication by Dielectrolysis.—The New York Medical Journal refers to a new therapeutical measure that must excite universal attention. M. A.

Brondel, of Algiers, brought forward a novel plan of medication at a recent meeting of the Paris Académie de Médecine ("Rev. Méd."). By the term dielectrolysis (diélectrolyse) he refers to a substance for making a nascent chemical process pass through the tissues. For example, taking iodine, a body which is really "dielectrolyzable," he applies to any desired part of the person a compress wet with a solution of iodide of potassium, and over it he places the negative electrode of a galvanic battery, the positive electrode being held against any indifferent part of the body. The iodine leaves the potassium, and, actually traversing the intervening tissues, rapidly arrives at the positive electrode, as may be ascertained by testing with starch paper. In effect, therefore, this is a hypodermic, or rather interstitial (intra-organique), method without wounding the skin or producing pain. As a great number of simple bodies may thus be made to penetrate from one point to another, the practical applications of the new method may be very numerous and very important. By it the author has cured fibrous tumors of the uterus, a case of perimetritis, a rheumatic ovarian neuralgia, and several cases of chronic rheumatism. He has in view further trials upon parasitic and malignant tumors, diseases of the skin, syphilis, neuralgias, etc., and especially pulmonary consumption, on which latter he proposes to try the action of various mineral antiseptics, such as arsenic, mercury, fluorine, etc."

Antipyrin.—In a paper contributed by J. E. Blomfield, M. R. C. S., Eng., to the October number of "The Practitioner," the author, in discussing the recent antipyretics, speaks of antipyrin.

"This body, known chemically as dimethyl-oxyquinicine, was discovered by Dr. Knorr, of Erlangen, and first subjected to experiment by Professor Filehne, of Munich.

It is a crystalline powder of a very pale salmon-pink color, with a slightly bitter flavor, but is more easily taken by patients than kairin; soluble in water, alcohol, chloroform, and ether. Like kairin, it gives various precipitates and colorations with different reagents, the most useful of which for general purposes to determine its presence are those with nitrous acid and perchloride of iron; with the former it gives a green color and with the latter a color resembling the pigment "dragon's-blood," or when the solution of perchloride is strong, a port-wine color. Its physiological properties have been investigated by M. Bouchard, by MM. Henocque, Arduin and Huchard, from whose researches it would appear that a toxic dose administered to a mammal produces a great fall of temperature, as much as 6.2 degrees Centigrade; the respiratory movements are at first quickened and then become much slowed, the heart-beats decrease in number with the fall of temperature, and after death the heart is found arrested in diastole. Tonic and clonic convulsions are produced, and a peculiar state of rigidity of the muscles, which allows a limb to retain any position in which it is placed, reminding the observer of the cataleptic condition. In an interesting experiment by Professor Bouchard it was shown that this action was due to the nervous system and not to an action of the drug on the muscles directly, for he found that if a limb was cut off from the central nervous influence by section of its nerve, it manifested none of this stiffness, which was found, however, in all other parts of the body.

No action similar to that of kairin on the blood-corpuscles and hemoglobin has been recorded, though experiments have been made with this object in view, but it has been found to produce a diminution in the excretion of urea. Dr. Queirolo has made an observation which is of importance in attempting to explain its antipyretic action, and interesting when taken in conjunction with the clinical fact of profuse sweats caused by its administration, and that is, that it produces a dilatation of the cutaneous blood-vessels before the diminution of the temperature commences, a fact which might tempt us to seize the idea that it is this profuse sweating which causes the fall; but it must be remembered that this is no constant or necessary effect,

and is not found when the doses are small.

I have tried the action of a five per cent solution on the blood corpuscles, but failed to find anything analogous to that described above of kairin.

On a healthy man, in non-toxic doses, antipyrin does not appear to lower the temperature, and it has been asserted to have the opposite effect. In the course of the experiments of MM. Arduin and Henocque a peculiar hemostatic action was found, which may possibly be turned to clinical account one of these days, but the data are not yet sufficient to pronounce with any confidence on this property. They were induced to make experiments in this direction by finding that blood flowed with difficulty from the vessels of an animal under the influence of antipyrin, and when comparative experiments were instituted with ergot and perchloride of iron as to the time in which each would arrest an artificial hemorrhage the balance was in favor of antipyrin.

We will now turn to the clinical and therapeutic actions of the drug; and first as to its mode of administration. It has been administered by the stomach, rectum and skin. The first is probably the best way, unless any particular reason exist against its use. When given hypodermically a good deal of pain is produced, and when given by the rectum its usual effect is manifested, which differs in no way from that produced by ingestion into the stomach. It has been employed in large doses and in smaller doses given frequently, and there is little doubt that the latter is the better mode of administration, and less liable to produce the few disagreeable symptoms that have been recorded against this drug. Of course, in considering the dose, we must bear in mind what effect we wish to produce. If we are in the presence of an acute febrile disease, whose temperature curve is rapidly approaching the hyperpyretic region, it would be well to administer one large dose, but if on the other hand we are dealing with a chronic febrile disease, such as typhoid or phthisis, it is well to administer it only in small doses sufficient to produce a slight fall in the temperature, and at such a time as we know the fever is on the ascent. It may be stated that the ordinary dose is a half to two grammes, or eight to thirty grains.

As regards the disagreeable consequences that have followed its administration, there have been recorded: a roseolous rash which soon disappears, sometimes vomiting after large doses, and profuse sweating, which may according to some authors produce a state of great exhaustion; so that it can be plainly seen the drug requires to be given with consideration and judgment, but it is freer than many antipyretics from the production of nervous troubles, such as shiverings, headaches, and singing in the ears, deafness, etc.

As far as my limited experience goes, I have seen none of these bad effects except the sweating, which is profuse but seems to have no bad effect on the patient. The drug can be found in the sweat within two hours after its administration.

The diseases in which the drug has been given form a long list, practically the same as a list of febrile diseases, and I do not propose to say much except on those where it seems to have a special value.

In typhoid fever the drug has been very largely employed, and the result arrived at may be stated to be a constant fall of temperature of a degree or more, varying with the dose. As may be imagined, it exercises no effect on the course of the malady, but is useful in combating the symptoms of fever, and it may be given in the afternoon or evening, as the temperature curve is commencing its ascent, with confidence that a fall of temperature will be produced; which fall, however, is not of long duration, lasting about six hours, unless more of the antipyrin be administered. In some observations made at the Hertford British Hospital in Paris by Dr. Mackew, he informs me that he noticed vomiting several times during its administration (but this was not necessarily due to the drug), and a rash as above described with the first doses (which were large, thirty grains); but a tolerance appeared to be established, for subsequently the rash was not produced. He

further found that atropin or oxide of zinc would control the sweating if given before the antipyrin. The conclusion arrived at was, that it was of undoubted value in the treatment of this disease.

In tuberculosis and pulmonary phthisis antipyrin has been largely employed, and observers speak very highly of its action when given in small doses, such as three or four grains for several days consecutively, for not only does it lower the temperature, but at the time "the patient experiences a sensation of bien être quite remarkable, the dyspnea is calmed, the sleeplessness disappears," so much so that M. Huchard speaks of it as the specific, not of tuberculosis, but of the tuberculous fever. In these small doses it does not produce the sweating which would be in phthisis a very undesirable result. It is possible, but I am not aware of any observations on this point, that its hemostatic action, before described, may be of use in this disease."

Relations of the Patella Reflex with Diphtheria and its Consecutive Lesions. —The Medical News takes the following from La Medicina Contemporanea: Bernhardt (Virchow's Archiv, vol. 99, 1885), in a critical research founded upon the literature of the subject and a series of twenty-one observations, makes the following statement of the relations existing between the patella reflex and diphtheria:

1. In a great number of patients who have experienced an attack of pharyngeal diphtheria, after some weeks the patella reflex is found to have disappeared.

2. Although in these cases the diphtheritic attack was for the most part severe, and was, together with the ordinary paralytic phenomena of the palatine muscles and of the eyes, accompanied by other notable disturbance of the central nervous system (general paresis weakness and ataxia), such was not always the case, since even in patients in whom the course of the disease was benign, disappearance of the patella reflex was observed.

3. Although the phenomena observed by Westphal (absence of the patella reflex), as certain observations of the author demonstrate, may be manifested only six or eight weeks after the commencement of the disease, the presence of the patella reflex, from five to eight weeks after the recovery from the disease, as certainly happens, does not guarantee that the patella reflex will not disappear later, and that he who, up to this time, had remained free from serious disturbance of the central nervous system, will not ultimately suffer therefrom. On the other hand, the patella reflex may not be found a few weeks (three or four) from the commencement of the disease, while the patient, save the paralysis of the veil of the palate and slight disturbance in the function of the arches, feels perfectly well, and may remain permanently free from grave complications.

4. The disappearance of the patella reflex after diphtheria appears frequently to occur only on one side; likewise, in its restoration, it seems regained only on one side, or at least is plainly stronger on one side than on the other.

5. Disappearance of the patella reflex having once occurred, its absence may be remarkably persistent (five or six months), even when the patient, having been cured, presents no other symptoms of having suffered from the disease, such as ataxia or paresis.

6. This fact appears to possess certain importance in those researches which tend to establish the presence or the absence of the patella reflex in persons restored to health, who, having suffered from an attack of diphtheria, cannot be enumerated among the cured until after five or six months.

7. Whether the patella reflex may not only be preserved during the first five or eight weeks after the disease, as certainly happens, but for months, or in a word is never lost, the author has not yet been able to establish with certainty.

8. The cutaneous reflexes and the tendon reflex are not affected to an equal degree; the former are frequently found active, while the latter fail entirely, a fact which, observed even in tabetics, leads, according to the author, to the conclusion that the processes for

the production of these so-called tendinous reflexes are distinct and not yet as sufficiently investigated as those noted in the production of cutaneous reflexes.

9. The observations upon the disappearance or failure of the tendon reflex after diphtheria have special value when the functions of the quadriceps extensor femoris are intact, when atrophy does not exist, and when the electrical excitability of this muscular group has suffered no profound disturbance and the patients are able to extend the leg freely and vigorously.

As to the explanation of this condition, that it may develop from the effect of acute infectious diseases, the author agrees with those who believe that it probably depends upon a disturbance of the function and nutrition of certain portions of the central nervous system, depending upon the emigration or development of germs.

The loss of the tendon reflex and ataxia are not in direct relation with each other. Both symptoms may be distinct and isolated. Tabes and diphtheria resemble each other in the fact that the loss of the tendon reflex precedes ataxia, and frequently is manifested only on one side; but in diphtheria ataxia either follows in a few weeks, or is entirely absent, while in tabes it frequently is not manifested until after the lapse of some years. A further distinction is, that the tendon reflex, when lost as a result of diphtheria, very generally is re-established—an occurrence extremely rare in tabes.

Medicines Which Stimulate the Liver.—The American Medical Digest says:

"Podophyllin in small doses is a stimulant of the liver. During the increased secretion of bile, the percentage amount of special bile solids is not diminished. If the dose be too large, the secretion of bile is not increased. It is a powerful intestinal irritant.

Euonymin is a powerful hepatic stimulant. It is not nearly so powerful an irritant of the intestine as podophyllin.

Sanguinarian is a powerful hepatic stimulant. It also stimulates the intestine, but is not nearly so powerful as podophyllin.

Irisin is a powerful hepatic stimulant. It also stimulates the intestine, but not so powerfully as podophyllin.

Leptandrin is a hepatic stimulant of moderate power. It is a feeble intestinal stimulant.

Colocynth is a powerful hepatic as well as intestinal stimulant. It renders the bile more watery, but increases the secretion of biliary matter.

Jalap is a powerful hepatic as well as intestinal stimulant.

Menispermin does not stimulate the liver. It slightly irritates the intestinal glands.

Babtisin is a hepatic, and also an intestinal stimulant of considerable power.

Phytolacin is a hepatic stimulant of considerable power. It also slightly stimulates the intestinal glands.

Hydrastin is a moderately powerful hepatic stimulant, and a feeble intestinal stimulant.

Juglandin is a moderately powerful hepatic and mild intestinal stimulant.

Chloride of ammonium is credited with cholagogue properties, but it is questionable; nevertheless, it certainly stimulates the intestinal glands.

Calomel is a powerful purgative, but whether it stimulates the liver is still sub judice.

Corrosive sublimate is a potent hepatic stimulant, but acts feebly on the intestines.

Sulphate of potash is a powerful intestinal irritant, but its action on the liver is variable and unreliable.

Taraxacum is a feeble hepatic stimulant.

Dilute nitro-muriatic acid has a moderate stimulant action on the liver.

Boldo, bromide of potassium, nitrate of potash and hard soap have each some stimulant action on the liver."

The Operative Treatment of Asthma.—The Journal of the American Medical Association reviews a paper of the above title that was read by Dr. Wilhelm Hack at the Fourth Annual Congress of Internal Medicine,

held last April at Wiesbaden, Germany. The Journal says:

"His address forms the latest contribution to our knowledge of certain reflex phenomena which have been carefully studied by French, German, English and American rhinoscopists. We refer to certain neurosal conditions, notably hemicrania and asthma, which are found to be occasioned reflexly by diseased states of the nasal mucous membrane. Attention was first directed to this possibility by Voltolini, who reported the cure of a case of asthma by the removal of a nasal polypus. Similar observations were subsequently made, and the subject was discussed by Hanisch, Fraenkel, Hack, Bresgen, Sommerbrodt, Porter, Daly, Todd, Spencer, Mulhall, Joal, Jacquin, Mackenzie, Eslberg and others in Europe and America. It was speedily discovered that not merely asthma and hemicrania, but also cough, supraorbital neuralgia, nightmare, chorea, epileptiform seizures, dizziness, palpitation of the heart, dyspeptic symptoms and other phenomena, attributable to vaso-motor disturbances might in rare instances have their point of departure in structural alteration or abnormal irritability of the nasal cavities.

For the most part these conditions are such as partially or wholly occlude the nares, as polypi; but Hack's observations have shown that these reflex phenomena are not due necessarily to the polypi, that is, to any obstruction of the nasal orifice,but to irritability of the nasal tissues. In several instances he removed redundant and irritable portions of adjacent mucous membrane, leaving the obstructing new-growths in situ, and thereby achieved an immediate cessation of the asthma. Clearly, then, the obstruction was not the cause of the mischief. In accordance herewith, Schaeffer announced that reflex manifestations might accompany chronic nasal catarrah, and endeavored to account for the asthmatic complications as being reflex through the vagus, and not at all due to direct impediment to the free passage of air through the nasal fossæ or to any chemical action of the polypi upon the inspired atmosphere, as was at first suggested.

Fraenkel went further than Schaeffer and explained all reflex manifestations as dependent upon an abnormal irritability of the sensory nerves distributed to the mucous membrane of the nose. Hack accepts this theory as satisfactory in many cases, but believes in the majority of instances that the connecting line between diseased conditions of the nose and the reflex disturbances, accompanying them, is an acute or chronic turgescence of the turbinated bodies, particularly the anterior extremity of the lower turbinated body. Accordingly, he destroys these hypertrophied structures, with the galvano-cautery, in every case where their enlargement seems to be the disturbing element. In his paper before the Congress, he reports two hundred and forty cases of hemicrania which were cured by the operative treatment. Of eighty-seven cases of asthma, a large majority was entirely relieved. Space does not admit of a detailed account of some of his cases, and hence our readers are referred to the "Berliner klinische Wochenscrift," Nos. 21 and 22. Hack's statistics are so gratifying that it would be natural and excusable if young rhinoscopists were rendered wildly enthusiastic by the perusal of them, and should expect astonishing results to follow every operation for the removal of redundant tissue or new-growths within the nasal fossæ. Yet, Hack himself, out of a vast experience, deprecates and warns against unbounded enthusiasm. While every rhinologist should be on the lookout for these cases, he must not be disappointed if he goes long without finding them.

Hack has undoubtedly explored this field of research the most thoroughly, and obtained the greatest fruits. Last year he published a monogram entitled: "Concerning the Operative and Radical Treatment of Certain Forms of Migraine, Asthma, Hay-Fever and Numerous other Allied Conditions." As it is beyond the scope of this article to review this monogram, we will only make a few extracts from the author's conclusions. Among conditions which reflexly occasion a turgescence of the turbinated bodies, he mentions pathological changes in the mucous membrane of

the nose or pharynx; excitation of nerves of special sense and sensory cutaneous nerves; disturbances of the sexual organs, as e. g., menstruation; direct irritation as from dust, heat or cold. On the other hand, turgescence of the turbinated bodies occasions various phenomena of a reflex nature. And in many of these Hack attributes the symptoms to a vaso-dilator influence upon the vessels of the part. Thus for instance, he explains flushing of the upper part of the face, hyperemia of the conjunctivæ, and in one case an amount of redness and swelling of the skin which actually amounted to edematous infiltration of the part concerned. The headache, lachrymation and other symptoms belonging to acute coryza and hay-fever, he would also account for as reflex manifestations.

In conclusion of this highly interesting and important subject, we think a word of caution not out of place, and hence quote the words of Morell Mackenzie. He says: "Whilst fully admitting that many reflex phenomena may arise from disease within the nose, I must caution the young specialists that the various complaints referred to as resulting from nasal disease are much more frequently due to other conditions, and that every other possible cause must be eliminated before the nose is incriminated."

Genital Irritation as a Cause of Reflex Phenomena.—Lewis A. Sayre writes on this subject in the Virginia Medical Monthly and details several cases in point as follows:

"Although I have so many times drawn the attention of the profession to the subject of reflex nervous difficulties from genital irritation, it still seems to me to be overlooked by the majority of practitioners; for scarcely a week passes in which one or more cases do not present themselves at my office. I, therefore, feel justified in calling the attention of the profession once more to this important subject.

The following cases are very illustrative of the remarks just made:

Case I.—Jno. Francis Bourke, aged six years, son of D. Bourke, 144 W. Twelfth street, New York.

Parents both healthy; one other boy, also healthy. The boy (Jno. F.) has always been healthy, but when he was three years old they noticed a peculiarity in his gait when running across the floor or in the street, and he would fall without any apparent cause. His appetite has always been good; bowels regular, and sleeps well. His parents also noticed that he was in the habit of handling his penis, and suspecting the nurse of getting him into the habit, they dismissed her. When he would make his water the prepuce in front of the glans would fill out with water and then burst out in a spray. About July 1, 1885, the parents noticed that he seemed to be getting quite lame, but could not account for it. This continued for over two weeks. The father then fearing hip disease, or disease of the spine, brought him to me.

On examination I could find no disease of any joint or bone in the body, although he had a peculiar limping, jerking manner of walking, his legs frequently crossing each other in a spasm. On examination of the penis the prepuce was found to be firmly adherent to the glans, the urethral orifice presenting a red, pouting appearance. On drawing the prepuce backwards it was found firmly adherent to the glans within an eighth of an inch of the urethral orifice, the tegumentary tissue of the prepuce, when drawn backwards, forming a constriction back of the glans, almost as though a thread were tied around it, leaving the mucous membrane adherent to the glans.

Treatment: Division of the constricting band and also the prepuce was torn up from the glans. (Circumcision was not needed.)

This was at once done and a mass of smegma was found behind the corona—simple water-dressing being then applied.

Ten days after all dressing was removed, and the wound was completely healed. The prepuce can be fully retracted without any constriction whatever. All symptoms of diseased hip have entirely disappeared, together with uncertainty of gait and nervous phenom-

ena; the child is walking straight and firmly.

Case II.—B. G——, aged five years, native of Virginia.

This boy has always, until recently, enjoyed good health, but at times would be extremely irritable, and hard to manage; and could not keep himself still. About two months ago the attention of the parents was drawn to this peculiar condition; more especially he would fall down without any perceptible cause, and then he could not get up without assistance; his speech also became very indistinct; and yet previously he had spoken remarkably plainly. He has never had any serious sickness, and has never had convulsions. Before he had these uncertain movements he had pain in his legs, but this in a measure soon disappeared, but the locomotion and ability to grasp with the hands became very markedly impaired.

The physicians in charge stated his difficulty to be chorea following upon rheumatism. His mind was always perfectly clear, and he understood all that was said to him.

Upon examination the boy was found to have a peculiar movement of both hands and feet; the face was partially idiotic in appearance. On examination of the sexual organs he was found to be suffering from congenital phymosis and adherent prepuce, with the penis in an almost constant state of erection.

The treatment consisted of circumcision and tearing back the adherent prepuce from the glans.

The mother stated that she noticed a difference in his speech; that it was more distinct four hours after the operation. Three weeks after the operation he returned home completely cured—being able to walk, talk and use his hands as well as any other child. In this case the result was a complete success.

Case III.—C. G. M——, male, aged seven years.

Child has always been very active, but extremely nervous. Nine months previous to coming to me he was jumping off a stoop; this was followed by severe vomiting. Physicians, one after another, were called in, until ten had seen the child, the only symptoms he complained of being pain and swelling in the groin. In spite of this array of medical skill he did not seem to improve under their treatment.

At the time he presented himself to me he was well nourished, but extremely nervous, being very clumsy upon his feet and tripping over everything or nothing. On examination of the penis the prepuce was very redundant —the mucous membrane being adherent to the glans—and upon touching the meatus there was immediately a spasm which convulsed the whole body.

Circumcision was at once performed and the prepuce stripped back from the glans.

Twelve days from the date of operation the child returned home, having completely lost all abnormal conditions of the nervous system. Since that time I have heard frequently from the physician that sent him to me that the boy was in perfect health, sleeping well, and running around like other children, with a perfectly steady gait.

In connection with these cases occurring in children, I give that of an adult who recently came under my observation:

Mr. M——, aged twenty-five years, an unusually well-developed, muscular man, but exceedingly nervous, came to me suffering from an injury to the spine from the plunging of his horse while horse-back riding, producing almost complete paralysis of the lower extremities, being unable to stand or walk without assistance, and suffering intense pain in the lumbar region. He was at once leeched, and this treatment was followed the next day by dry cups along the seat of the injury, and he was retained in the horizontal posture for some weeks. During this enforced quietude my attention was directed to his extreme nervousness, which amounted almost to hysteria; and on examining his penis I found this organ in a state of erection; the prepuce was firmly constricted around the glans, and it was with great difficulty it could be pushed behind the corona. The frenum was so very short as to draw the urethral orifice backwards and open. The least touch upon the meatus produced a peculiar nervous

spasm of the entire body. The prepuce being drawn behind the glans a thin white line was to be observed girdling the entire penis and he complained of this causing him great pain. He then informed me that he suffered from constant erections of the penis, frequently lasting from twelve to eighteen hours. In many instances while in the society of ladies he was compelled to leave the room, and frequently while horse-back riding he would have to get off his horse and abandon this exercise as the penis would become so irritable and erect that semen would pass involuntarily from him.

I divided this girdling band upon the dorsum of the penis and then divided also the frenum, tearing the latter down to the extent of nearly an inch, thus allowing the glans to assume its natural appearance and removing all constriction.

Since the operation his nervous system has undergone a complete and entire change, and he will now leave on an extended European trip.

These are but a few of the cases I find recorded in my Case Book; but they are sufficient to illustrate the fact that this source of nervous irritation exists much more frequently than is generally expected."

CONTRIBUTION.

PATHOLOGICAL CHANGES IN ACUTE AND CHRONIC DYSENTERY.

By James C. Pearson, M. D., Mitchell, Ind.

Read Before the Mississippi Valley Medical Society.

It is not without some degree of diffidence that I present this subject for your consideration, for it requires an immense amount of research and study to speak intelligently on this subject; and from my own observation it would be necessary first for me to make personal examinations of the bodies of those who die of dysentery. We do not have such advantages as are usually obtained in hospital practice, neither do we have the privilege of making autopsia cadaveris during the prevalence of dysentery in our little city, nor in its vicinity, owing to the popular opinion arrayed against cutting and mutilating the dead bodies of friends and relatives. This state of society is to be regretted and deprecated in the strongest terms for the sake of humanity alone. Yes, humanity cries aloud demanding a further advance in histology, a more rational and perfect understanding in pathology. Since the days of Hippocrates acute dysentery has attracted the attention of medical writers because of its frequency, painfulness, and fatality. The morbid conditions observed in the intestinal mucous membrane after death from acute dysentery do not differ from those given by Hippocrates as much as our advantages in the study of anatomy and pathology would lead us to anticipate. Hear what the old sage of the island of Coss has to say! After stating that diarrhea is one of the consequences of habitually taking too much food in proportion to the amount of exercise used, we are told that so long as putrescent alimentary matters only are passed from the bowels, the disease is called diarrhea; but when the body is heated, acrid matters are discharged, the intestines are excoriated, ulcerated and the stools are bloody. This is dysentery, a grave and dangerous disease, the intestines are ulcerated internally, grumous evacuations come from them, sometimes the excretions are mixed with fecal matter, always liquid. At other times the discharges are slimy, sometimes particles like flesh pass with them, there is a frequent desire of going to stool, and pain in the anus. With this pain a small portion is voided and even by this the pain augmented, that is, relieved after some time, and then there is a short repose. The sleep is interrupted, slight fever ensues, and in the process of time that disease either destroys the patient when it has become inveterate, or even, although it may be terminated, exerts a baneful influence for a long time. Modern writers have considered themselves justified in dividing the acute form of dysentery into two groups. In the first there is acute inflammation of the intestinal mucous membrane, being more pronounced in the lower colon and rectum. This is regarded as the milder form of dysentery. The second group presents the character known as pseudomembranous or diphtheritic, the severer form of dysentery. I will now present autopsies showing the different forms, also the changes in the pathology of dysentery. Autopsies taken from the medical history of the war of the rebellion of 1861-1865 Vol. I, Part 2, Sec. 3:

Case 203. Private John Brooks, Company A, 146th Indiana Volunteers, admitted Aug.

12th, '65, Acute dysentery. This man was on duty in the guard of the hospital when taken sick. When admitted he had frequent discharges from the bowels and bilious vomiting; pulse, 108 and full, tongue coated in the centre. He complained of pain in the epigastric region especially after vomiting. August 19: The discharges are bloody and very frequent, hiccough is troublesome. August 28: Had a profuse hemorrhage from the bowels last night. August 30: The patient is comatose, the stools black, offensive and passed involuntarily. Died September 1. Autopsy, twenty hours after death. Body not much emaciated, rigor mortis slight. There was some congestion of the pia mater posteriorly; the brain apparently normal, it weighed forty-seven ounces; its lower lobe was congested posteriorly. The left lung was normal; it weighed fourteen ounces. The liver weighed sixty-four ounces, numerous little yellowish white nodules were scattered through its substance, the largest about the size of peas. The spleen was firm, and weighed seven ounces and a half. The pancreas weighed two ounces and a half. The right kidney weighed five ounces and a half, the left seven and a half. The intestines were ash-colored externally. The mucous membrane of the stomach was discolored in patches. The patches of Peyer presented the shaved-chin appearance. In the upper part of the ileum a granular matter adhered to the valvula conniventes; in some places it was pale, in some brownish, lower down light colored patches, resembling superficial ulcers, were associated with Peyer's patches. Just above the ileo-cecal valve the ileum was honeycombed by a large number of ulcers which penetrated to the muscular coat. Throughout the large intestine there were many deep ulcers, between which the mucous membrane was of a deep cherry-red color. The coats of the intestines were readily torn. —Assistant Surgeon George M. McGill, U. S. A.

Case 238. Private James Harvey, Company K, 26th Massachusetts Volunteers. Admitted September 14, 1864. Acute dysentery. The patient when admitted had bloody dejections every five minutes and complained of severe pain in the region of the bladder; he was unable to pass his urine. It was drawn off by the catheter. He died during the night of the 15th. Autopsy ten hours after death. There was slight peritoneal inflammation; the mucous membrane of the colon was much inflamed, and in the ascending and transverse colon there was some ulceration. The coats of the colon were thickened; the mucous membrane of the rectum was highly injected.—Acting Assistant surgeon, Richard W. Mansfield.

Case 214.—Private I. N. Keeton, Company D., 2nd Virginia Cavalry, age 19; admitted October 25, '64; chronic dysentery. Died March 15. Autopsy, eighteen hours after death. No rigor mortis. The lower portion of the ileum was congested, the mucous membrane of the colon was thickened, and of a very dark blue color, except about six inches of the descending colon which were ulcerated. All the other viscera were normal.—Acting Assistant Surgeon George W. Fay.

Case 249.—Private John Green, Company A, 14th West Virginia volunteers; age, 41; admitted January, 17, 1865. Chronic dysentery. Died February 10th. Autopsy, four hours after death. Body extremely emaciated. The brain and thoracic viscera were not examined. The omentum contained no fat, the liver was somewhat enlarged, the gall bladder was full of bile. The spleen was very small. The mesenteric glands were enlarged and hard. The kidneys were also hard, and their cortical portion appeared to be inflamed. Patches of inflammation were found in the ileum and the corresponding peritoneal coat was injected. The whole tract of the large intestine from the cecum to the anus was a mass of ulceration, not a trace of healthy mucous membrane being recognizable.—Acting Assistant Surgeon, M. M. Townsend.

Case 204. Private John Whalen, Company G. 3d New York Volunteers, aged 30, admitted August 31, 1865. Dysentery of about four days duration. Died September 6th. Autopsy. Muscles well developed; rigor mortis is marked. Pia mater rejected; brain substance normal, the brain weighed forty-nine ounces. Pleuritic adhesions existed on both sides; there was some deposit of tubercle in the upper portion of both lungs; in the left lung the tuberculous masses were of considerable size, and the lung-tissue surrounding them was solidified. The tubercular deposit was firm and no cavities had formed. Both lungs contained much black pigment; the right lung weighed twelve ounces and a half, the left fourteen ounces. The heart weighed ten ounces and a half; white clots were found on both sides. The liver weighed eighty-six ounces; on section it was light colored, on the upper surface of the left lobe were two depressions resembling cicatrices. The spleen was firm and weighed seven ounces. The pancreas weighed three ounces and a half. The right kidney weighed five ounces, the left six ounces. The suprarenal capsules were large. The mucous membrane of the

stomach was congested and of a scarlet color. The jejunum contained a yellowish viscid jelly-like substance, which became dark colored lower down. In the lower part of jejunum and upper part of the ileum the mucous membrane was of a dark purple, lower down were numerous minute circular superficial ulcers to which a light gray pseudomembrane adhered, the large intestine was thickened and coated with greenish-yellow pseudomembrane from the cecum to the rectum; at points where this layer was deficient the mucous membrane was dark purple.—Assistant Surgeon George M. McGill, U. S. A.

Alexander of Tralles sometime in the sixth century by the title of dysenteria rheumatica described an intermediate state between that of inflammation and ulceration of the intestinal mucous membrane in which shreds of the intestine (pseudomembrane) are mixed with the discharges, stating that if protracted the first variety might pass into the second. His view or description does not accord with our present knowledge of pathological anatomy.

On reading the pathology of dysentery we are at once impressed with the idea of its being a local phlegmasia having the common elements of general pyrexia or fever, local hyperemia and local exudation. What relation has the fever to the local affection, or, vice versa the local affection to the fever? Whether by the absorption of poisonous material by the vessels from diseased parts of the body, when the fever and local affection are simultaneous in their appearance, or by morbid alteration from processes occurring in the blood itself, I believe has not yet been determined.

* * *

Discussion.

Dr. Louis Bauer thought that dysentery came from constipation. He had had it twice himself from this cause and treated many patients suffering from the same trouble. Instead of being eliminated the feces corrode and form bad smelling gases. He reported a case he had operated upon for stricture of the intestine and discussed the operation. The doctor has a sly way of obtaining post-mortems in his patients. He embalms them free of charge.

Dr. Joseph Eastman discussed the dilatation of the rectum.

Dr. A. C. Bernays, of St. Louis, gave his experience in dilatation of the rectum. He gave some instances of Simon putting the hand and arm into the rectum. The question was asked what advantage he gained by such a procedure and was it justifiable. He replied that it afforded an excellent opportunity of exploring the abdominal organs. The kidneys could be palpated. Stones or abnormal growths be diagnosed as well as adhesions of the peritoneum. In answer to the question, was not the hand crushed till it had lost the finer sense of touch, he replied no. He related a case where a man sat down on a quart bottle of champagne and the whole thing disappeared up the rectum.

Dr. Beard, the president, called Dr. Bernays to the chair, and spoke of a case where a large fish bone was swallowed and took three years to make the journey through the canal.

CLINICAL LECTURES.

A CASE OF RETENTION OF URINE.

BY J. W. S. GOULEY, M. D.

Prof. of Clinical Surgery at the New York University Medical College.

(Delivered at Bellevue Hospital.)

Patient aet. 23. Had contracted gonorrhea four weeks ago. This began to improve, but owing to exposure and neglect, he suffered from retention of urine. A clap usually begins in the fossa navicularis and slowly extends back farther and farther until it reaches the sinus of the bulb, where it is apt to linger months and years as a chronic urethritis. Sometimes, however, its backward progress is very rapid, so that within a week it will extend back to the prostatic urethra.

This, gentlemen, is a case of retention of urine from drink and exposure during the time of the clap. The inflammation extending gradually to the sinus of the bulb, finally invaded the prostatic sinus and the urethro-vesical orifice. The urine becoming acrid from the drinks that he has taken caused a certain amount of irritation, but in addition to this came the exposure. A sudden swelling took place at the urethro-vesical orifice, an edematous swelling due to stasis, stopping his water, very much as a man's throat gets stopped up when he takes cold. His whole pharynx then becomes edematous; the velum becomes swollen, and the tonsils swell out. So there is a peculiar sense of constriction in the throat. Now here we have the same thing. The urethro-vesical orifice is swollen, and there is a retention of urine that has become acute. It occurs in the same way in elderly

men. We have a certain amount of prostatic enlargement, and the exposure of sitting on a cool, wet stone will bring on retention in these old men.

Now, gentlemen, I have told you the cause of this man's retention and the nature of it. There is no stricture about it. There is no such thing as spasmodic stricture of the urethra. If the urethra did not contract spasmodically, and the fibres of the urethra become exactly as hard as those of the uterus, there would be no ejaculation of semen. So there must be fibres of that kind that always contract strongly and quickly, and sometimes when the bands of fibres contract irregularly we have a spasm. If the contractions are synchronous, there is no spasm, properly speaking. But spasmodic stricture has no existence.

Cases of this sort have been for many years very improperly treated. Surgeons have allowed the bladder to become over-distended to such a degree as to set up a chronic cystitis, which is very hard to cure. With this cystitis we have a contraction of the urethro-vesical orifice. A case of this sort, if neglected, will be followed by permanent contraction of the urethro-vesical orifice. If you could see the urethro-vesical orifice of this man you would find a number of tortuous vessels, and some capillaries which have become considerably swollen, and little vessels removed from the capillaries which have become tortuous, almost like varicose veins.

Treatment.—As to the treatment of this case there is only one way to treat such a case with retention of urine, namely, by the catheter. The catheter should be immediately used before the bladder has had time to become over-distended. Remember that in a young man in a healthy bladder, retention of urine will make itself manifest in a very short time. If he cannot make water for two hours he will begin to suffer. In a half dozen more hours he has an increase of agony and must be relieved. You relieve his bladder for two or three hours, and he feels all right. But he cannot make water himself. You introduce the catheter again, but in the meantime you have begun general treatment; and one of the best things to use in a case of this sort is the free administration of an alkaline drink, such as bicarbonate of potash, dissolved in a large quantity of water. I should give this man three or four large doses of bicarbonate of potash, and should expect that at the end of eight or ten hours he be very much relieved. I should then put him into a hot hip bath for five minutes. After the catheter has been used, give him a grain of the aqueous extract of opium, and a quarter of a grain of the extract of belladonna, made up into a suppository with butter of cocoa, and catheterize him every three or four hours. Keep him quiet. Renew the hip bath twice a day. Do not continue the alkali in large doses beyond the fourth dose. After that you may give him another dilute mineral water to drink, as Vichy or flaxseed tea with a little nitre. The four free doses of alkali have done their work during the first day, and you must not expect him to urinate all at once. It may be four, five, six days, or nearly a week before he will urinate spontaneously.

It is now two days since he entered the hospital and six days since he had retention, and he has just begun to make water spontaneously. This morning and along the middle of the day, he passed a little urine, showing that this congestive trouble—this stasis, or swelling, resulting from this stasis connected with the bladder, is not cured. He is still suffering from cervical cystitis, a cystitis of the neck of the bladder, and a quite acute prostato-cystitis because of the inflammation which extends as far back as one-half inch around the urethro-vesical orifice. This requires irrigations, urethro-vesical irrigations with soothing substances at first, such as solution of biborate of soda in glycerine; glycerine with four or five grs. of biborate of soda dissolved in six ounces of warm water. This should be thrown into the bladder, an ounce at a time; let it run out and leave the last ounce in, and very soon after use other irrigations. I employ the nitrate of silver irrigations. I should use not more than one-fourth, one sixth or one-eighth grain every third day in a case of this sort. I do not like the plan in a case of acute cervical cystitis, of introducing a bulbous bougie and then throwing in fifteen or twenty drops of the solution of nitrate of silver containing thirty grains to the ounce. That causes a great deal of pain and a considerable amount of bleeding. I have used it in a number of cases and have given it up for milder irrigations.

I presume that in the course of another week this man will be better. I should continue to use the urethral irrigations on account of the existing urethritis as well as the prostatic cystitis, and he will get well as a rule. If not, he will have urethro-vesical inflammation, and residual urine setting up a chronic cystitis, and the only cure then is incision or excision. Incision in a moderately new case would be preferable. You may give him now thirty grains of the citrate of potash.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, Nov. 7th, 1885, the President, Dr. Atwood in the chair.

NECROSIS AND CARIES OF BONES AT KNEE-JOINT. ANKYLOSIS—SPECIMEN.

Dr. Dibble presented a specimen of the bones of the leg together with the patella and a portion of the femur all firmly united by bony union. The patient, when a boy of 13, slid down a haystack and struck the tibia, an acute periostitis and synovitis being set up. Thirteen months after his leg was amputated. He then weighed 128 pounds; four months after his weight was 196 pounds. He has remained well and healthy to this day.

Dr. Coles inquired if the discharge was limited to the joint.

Dr. Dibble stated that it came from the tibia as well as from the joint.

INTESTINAL OBSTRUCTION. — LAPAROTOMY. — SPECIMEN.

Dr. Thornton spoke of a German, aged 43, who some two weeks previously whilst moving lumber noticed a chill. In the middle of the same night he experienced a severe pain. His bowels had moved the preceding Sunday; in consulting a physician he was given a dose of calomel which did not act. A few days after an injection brought away a slight amount of fecal matter, but the next day he had stercoraceous vomiting. Last Thursday he was seen here—warm applications were made to the abdomen and this morning laparotomy was performed. There was found a band passing from the right side of the omentum over the ileum, 1½ inches above the ileo-cecal valve and to the opposite side. This was removed, and upon examining the mesentery, 1½ inches of it seemed to consist of cicatricial tissue. A part of this was also removed. Two hours later the patient had rallied pretty well. He had been thirteen days without any operation from the bowels.

Dr. Lutz inquired as to what the state of the intestine was at the point of strangulation.

Dr. Thornton answered, good. There was peritonitis, however. The incision was made in the linea alba from the symphysis pubis to two inches above the umbilicus. No history of injury to the abdomen could be obtained. The larger band formed was not of recent origin; the smaller ones were. There was no hemorrhage from the cicatricial tissue; but three vessels in the omentum were tied with carbolized cat-gut. Both bands formed caused constriction.

Dr. Lutz thought the case illustrative of the best surgery that could be practiced in such cases. It is well-known that death in cases of intestinal obstruction is generally due to hesitation on the part of physicians in cutting open the abdomen. This case would have died without an operation and all can, no doubt, recall cases where the patient would have been saved had the patient been operated on in time. Dr. Lutz here detailed two cases of strangulated hernia in illustration. He thought the prognosis in the case reported was pretty good, if the condition of the bowels was such as reported.

HERNIA OPERATIONS.

Dr. Hendrix reported a case of femoral hernia in a woman of 65. There was stercoralceous vomiting and Dr. Osann operated, but unfortunately only relieved the stricture around the sac and returned it with the bowel in it. The post-mortem showed the sac strangulated the bowel. The time will perhaps come when there will be less hesitation in opening the abdomen in such cases.

Dr. Hurt saw a case of a woman of about 35 when he was superintendent of the City Hospital. It was a small ingiunal hernia and seemed strangulated. She was menstruating at the time. Dr. Hodgen proceeded to operate and was successful in reducing the hernia. In less than thirty-six hours she died and the autopsy revealed in the peritoneal sac about two tablespoonfuls of blood clots and the speaker regarded the death as caused by peritonitis, due to retro-uterine hematocle. She had had hernia from early womanhood and it had never bothered her.

Dr. Mudd stated that a couple of years ago he had seen a woman who suffered periodically from obstruction of the bowels. Upon post-mortem the transverse colon was found to be drawn down and the loop fastened in the pelvic cavity. There were also twenty-one distinct points of ulceration in the bowel, so that in many the contents had escaped into the peritoneum, and not only above but below the site of stricture. In another case of obstruction, which was operated, the autopsy revealed a constriction of the colon at the sigmoid flexure due to an epithelioma of the size of half a walnut.

Herniotomy—Radical Cure.

Dr. Mudd thought that herniotomy is an interesting operation because of the uncer-

tainty of the condition that will be found. In a case of congenital strangulated hernia in a child twenty-six days old he cut down and found the bowel thickened and reddened—covered by a plastic exudate. The ring was firm and well-defined. It was so tight that the tunica vaginalis was congested and the testicle had sloughed, the epididymis being intact and the hernial sac having good vitality. The sac and testicle were removed and the bowel returned with its coating of plastic material. It is difficult to tell when it is proper to return the bowel, and there is perhaps no better way than by taking the tissues between the fingers, there being a certain amount of elasticity present when the vitality is retained. Dr. Mudd here detailed another case of strangulated congenital hernia in a man of forty-five, the bowel being gangrenous. It was resected and the ends sewed together. The man died. The speaker did not think that a large incision is necessary to determine the point of constriction in a hernia. He had noticed that when the sac constricts and it is reduced with the bowel in it, it still presses against the finger, whereas when the bowel is freed of its constriction it seems to leave suddenly. He thought herniotomy a very successful operation, as a rule. It was a well known fact that in omental adhesions care should be taken to ligate, as bleeding is apt to occur.

Dr. Green inquired if stercoraceous vomiting continue after herniotomy is not the condition similar to obstruction in its results, and in such a condition ought not an operation be performed either to establish an artificial anus or to cut off a part of the bowel?

Dr. Fairbrother had a simple case of hernia on his hands, and wished to know if extensive sloughing of the scrotum had ever resulted in a cure of scrotal hernia? He had a patient with a scrotal hernia of long standing, reducible, which seemed in a fair way of being cured. The man had urethral stricture followed by extravasation of urine and extensive gangrene of the scrotum, perineum and left inguinal region. Nearly all the integument and subcutaneous fascia was destroyed. The hernia has been carefully kept reduced since granulation commenced, and the man can stand and walk with the hernia coming down.

Dr. Mudd in answer to Dr. Green's query thought it would be correct to perform laparotomy and cut out a portion of the bowel, but did not know but that it would save more lives than by leaving the sphacelated portion in the hernial opening and wait for an artificial anus to develop, remembering that this could be closed later on by a safer operation. In Dr. Fairbrother's case he doubted very much that it would result in a cure. He thought that we are nearer the solution of the question of a radical cure than ever, and this through the attention paid to the hernial sac. He believed that simple excision of the sac offers a better chance of a radical cure than by bringing the walls of the canal together as in the old operations. By drawing down the sac as far as possible, excising and ligating its neck and then allowing it to go into the abdominal wall, adhesions form; and, in addition, the precaution can be taken of uniting the pillars of the ring. He has performed the operation in cases of congenital inguinal hernia, but has not been enabled to see the ultimate results except in one case which was still in good condition eighteen months after the operation.

THE AMERICAN ACADEMY OF MEDICINE.

REPORTED FOR THE REVIEW BY WM. H. MORRISON, M. D., PHILADELPHIA, PA.

The ninth annual session of the Academy was held October 28 and 29, 1885, in New York city.

The meeting was called to order by the president, Albert L. Gihon, M. D., of Washington.

Prayer was offered by Rev. Henry J. Vandyke, Jr., of New York.

The following gentlemen were elected fellows of the Academy:

S. M. Nelson, Cambridge, Mass.; J. H. W. Chestnut, Philadelphia; Rufus W. Bishop, Chicago; E. E. Marriott, Springfield, Mass.; Geo. N. Acker, Washington, D. C.; H. V. Logan, Scranton, Pa.; H. W. Elmer, Bridgeton, N. J.; H. F. Hansell, Philadelphia; E. W. Cushing, Boston, Mass.; J. S. Wight, Brooklyn, L. I.; William Osgood, North Yarmouth, Me.; C. A. Packard, Bath, Me.; W. K. Oake, Aubern, Me.; A. Mitchel, Brunswick, Me.; D. A. Robinson, Bangor, Me; C. A. Rino and J. A. Spaulding, Portland, Me.; G. W. Marshall, Milford, Del.; Wm. A. Hugie, Charlestown, S. C.; J. S. Shapleigh, St. Louis, Mo.; M. H. Post, St. Louis, Mo.; C. E. Briggs, St. Louis, Mo.; J. S. B. Alleyne, St. Louis, Mo.; H. S. Davis, Jr., Chicago, Ill.; Charles Edgar Cook, Illinois.

Dr. Henry H. Smith, and Dr. S. Weir Mitchell, of Philadelphia, were elected to honorary membership.

The first paper was read by Dr. Robert L.

Sibbett, of Carlisle, Pa., and was entitled,

THE STUDY OF MEDICINE AS A MEANS OF EDUCATION.

The doctor first referred to the various elements in education, considering time the most important of these. The medical colleges of the United States are, he thought, institutions not to be proud of. In this country 319 medical colleges have been chartered at one time and another. Of this number 137 were regular. Ninety-three of these colleges have become extinct. Of this number fifty-seven were regular. Contrasting this with the situation in Canada, it is found that there only fifteen medical colleges have been chartered, and of this number twelve remain, all of which are regular.

At the present time there are eighty-seven colleges in this country teaching rational medicine, and twenty-nine teaching sectarian medicine of various kinds. The practitioners of rational medicine have no need to come in contact with the practitioners of sectarian medicine in any way. In boards of health and State examining boards it is not necessary to have any association with them.

Taking up the subject of medical teaching, preliminary examination, with graded courses and frequent examinations, were heartily recommended. Now a person may graduate as a doctor of medicine, without having even a rudimentary knowledge of grammar and arithmetic. The medical colleges must take the responsibility of such graduation. A protracted course of academic training is necessary for a proper study of medicine.

The speaker concluded by saying that a state medical examining board with full authority to examine all practitioners, irrespective of the degrees they may hold, would do more to elevate the profession than all other means combined.

Dr. Charles McIntire, of Easton, Pa., then read a paper on

MEDICAL SUPERVISION IN STUDENT LIFE.

This paper assumed that time had changed; that modern life made a greater demand upon the time and energies of the individual to the detriment of his health and development. It was considered impossible to diminish tasks and give more to rest and recreation. There is no way known to shorten the period of rest, so something should be done for recreation. The plan suggested was the usual one given by students on these subjects. A careful physical examination at the beginning of school life and a series of graded bodily exercises under medical supervision throughout school life was recommended. Many appear to be ignorant of the end to be obtained by a modern gymnasium, so that in colleges the parents of the pupils were afraid that their children would be injured by the gymnasium; but as the weaklings are the subject of especial care and direction, they are the ones least apt to be harmed and most likely to be improved. The end aimed at is to give such tasks as will tend to strengthen the weaker parts.

Dr. Henry O. Marcy, Boston, read a paper on

THE CLIMATIC TREATMENT OF DISEASE, WITH AN ILLUSTRATION OF WESTERN NORTH CAROLINA AS A HEALTH RESORT.

The fundamental factors of the zymotic diseases were first reviewed from our present knowledge of the role of the bacteria, and the question of the wise adaptability of the individual to his surroundings was considered as the best definition of climate. A résumé of the latest investigation of climatologists was given with reference to, and the results obtained by, the mountain health resorts of Europe and America. The deductions of the writer were that good must be looked for in the benefit to be obtained to the individual in the improvement of his resisting vital powers and invigoration of his cellular tissue regeneration, rather than an escape from his bacterial enemies. The larger portion of the paper was devoted to the consideration of this new and important phase of the question of climate.

The higher Alleghenies in western North Carolina were described at considerable length as offering mountain health resorts of a character well suited to a variety of diseases. The deductions were based on a long tour of personal investigation made during the last summer as a sanitary study.

The meeting then adjourned.

Evening session, held at eight o'clock.

The President, Dr. Albert L. Gihon, A. M., M. D., read his annual address entitled,

WHAT IS MEDICINE?

He said that the place of the academy was not to be sought among the pathological, clinical, sanitary and other national associations. It antagonizes none of these, but seeks to cement all into a compact unity.

Referring to the slow growth of the academy, it was stated that one of the reasons was to be found in the fundamental condition of membership, restricting fellowships to graduates in medicine who have received degrees

in letters. As the co-operation of every educated man interested in the objects of the academy is desirable, he was of the opinion that the time had come when every limitation to fellowship should be removed except the solitary requirement that the candidate shall be in fact, as in title, "learned in medicine," and in all else that this term implies, but he would make it impossible for any one unfit or unworthy to enter, though he come with an armful of diplomas, have subscribed to the most inflexible of codes, and no matter what faculty, society, or institution he may be delegated to represent. The nominations should be accompanied with the fullest record evidence, and be made long enough in advance, six to eight months, to enable the council to determine each man's fitness.

A second reason why the academy had not met with more pronounced sympathy and support is its necessarily hostile attitude to institutions and individuals who defy the principles of its constitution.

The academy encounters a third obstacle in the lukewarmness of its quasi-friends; some damning it with faint praise, others exuberant in private but chary of public indorsement. Reference was made to the case of a medical editor, who could not follow his wish in this respect on account of policy. The editorial columns of the medical press were pre-eminent ly high-toned, but the publishers were inconsistent in permitting under the same cover advertisements of medical concerns, drug factories and proprietary clap-traps. Why should the business venture of men who get up sham colleges be advertised in reputable journals? The New York Medical Record commends the recent action of the Florida Medical Association in resolving against the advisability of establishing a medical college in that state. These are encouraging signs, offsetting the fact that thirty-nine of the eighty-seven regular schools in the United States are only fifteen years old and twenty-one not over five years. Reference was made to the fact that trashy communications of illiterate M. D's., were published simply because they were subscribers. The journals only reflect sentiment. Let us ask ourselves the question "What is Medicine?"

If we look to this academy for the answer, we shall find that it is the most profound and ennobling study which can engage the intellect of man. This is not the popular idea, which is, that medicine is only something in a box or bottle that is prescribed by a man or woman who has acquired more or less skill in administering the particular remedy appropriate for each disease. Like other professions whose offices are called for by the disagreeable incidents of humanity, it is only tolerated as a necessity. Sham aristocrats look down upon it, others hire its members as they do their cook and cabman. In military and naval services they are sought to be degraded. The ministry of the suffering and afflicted is nowhere regarded as an outcome of the study of the stupendous and sublime mysteries of existence. In the national councils, in military and naval organizations, in civic administrations, who thinks of giving a first place to a physician, although his are the mental attainments which fit him best for council in all that concerns the welfare and progress of the human race?

The science of medicine involves the knowledge of everything that relates, however remotely to the existence of man, his place in nature, his origin, growth and development, preservation and continuance. The prevention and cure of those abnormal conditions which tend to his destruction, are but one chapter in the volume, which coming near the end, cannot be read understandingly without the thorough comprehension and diligent study of all that precedes. Medicine is so far-reaching in its sources and so connected with every other branch of knowledge that he who would begin its study must first have drunk deep of the well-spring of human knowledge. Medicine is a science of such proportion that only a well educated man can master it. Is this the view entertained by the profession at large? What are the facts?

Let us see how the profession is recruited. Ordinarily a youth becomes a doctor, as it were, from a whim, and there are others, no longer young, and having failed in other occupations, they hope to make money by this, knowing nothing of its responsibilities and requirements, without aptitude, ignorant, illiterate, etc. Such a one goes to a college and as a first course student listens to lectures on anatomy, practice, chemistry, surgery, etc., without understanding a word of the technical language. Seventy-nine colleges require evidence of preliminary education. In most this is only specious. Recent instances of illiteracy on the part of graduates before examining boards are the following: "Colume of murcury," "cours at Beleview," "anylitic," "ascend," "admition," "diamete of the earth ninety two thousand miles," "the field of the cloth of gold, some kind of tapestry," "an alterative acts like foodon building up system, and are favored in their action by stomachic, or anything which arouses the system to action." Could the man who after graduation says "was began," and spells gravatation, fe-

meral, superating, corpusels, etc., have ever comprehended the language used by the teachers.

Why should medicine be cheapened to every purchaser and the college debase its teachings to their limited understanding? A collection of theses presented to American medical colleges during the last five years would be more entertaining than "English as she is spoke." Only the utter ignorance of elementary chemical principles on the part of the men who study medicine has made chemistry one of the seven chairs. It belongs to an academic course.

What only can medicine be to the ignorant numbers who are annually mustered into the ranks of the profession? To these men it can have no other aspect than that of a trade. Many enter upon it as a money making vocation. It was taught them as a source of pecuniary profit, and they practice it for the fees they get. Manifestly, then, medicine is not the same to all men, even medical men. If improper men can be excluded from national services, why not from state, county and city medical societies? This should be done for the protection of the community. Where a drug clerk kills one victim by his carelessness, he saves a hundred by recognizing errors in physicians' prescriptions. (Examples from apothecaries' files were given.)

The debasement of medical education to the capacity of the ordinary purchaser of a diploma will eventually cause the profession to deserve the reproaches of its friends. The public gauge the profession by the men with whom they most frequently come in contact. The wise physician does not hesitate to say "I do not know." The typical doctor affects all omniscience in inverse ratio to his knowledge.

Until the mystery of the first departure from health is made clear, all our therapeutics must be empirical and fundamental methods of cure be speculative. If we have not learned where disease begins, we have at least learned that the follies and weaknesses of man have in their wake a multitude of ills, and these we can prevent, and the wise physician learned in all that pertains to the normal life of the body aims to protect it from these evil influences, which his experience has taught him will do it harm.

Preventive medicine has at last attained recognition as the highest aim of the physician's art. It establishes new relations of the physician to the social system. It is not creditable to the intelligence of the age that in the department controlling internal affairs, among bureaus of labor, statistics, agriculture, education and so on, there is no bureau of public health. Preventive medicine has more to do than warding off epidemic visitations of great scourges. Its most important duty is to consider the impairment of health of growing children through the sanitary defects of our school system, the prevention of insanity, the repression of crime. It is too much to expect antidotes for every microscopic germ. The tiny swarms around us are at once friends and foes. If we do not antagonize them, they purify the air we breathe, the water we drink, the dirt we tread and prey upon our natural waste; it is only our own folly that causes them to turn and rend us. We are too prone to hasty generalizations. We inconsistently denounce the doctrinaires, who affect to believe in the panaceic virtue of similars, and ourselves find cure-alls in quinia, cocaine, germicides, etc.

Hence the greater need of impression upon the tyro in medicine the fact that there are underlying principles never to be lost sight of. The chair of institutes of medicine has gradually been supplanted by that of principles and practice. If he were to banish chemistry and physics from medical colleges, he would establish a chair of the philosophy of medicine, to include the history of medicine, medical literature, medical jurisprudence and medical ethics.

Reform has been hampered by adherence to existing methods. It will not do merely to establish adjunct chairs. The starting point must be the requirements of a thorough preliminary education. Four annual terms are necessary. Descriptive anatomy and materia medica are enough for the first year. Histology and practical microscopy, physiology in all its relations, and the mechanical processes of pharmacy should occupy the second year. Hygiene, general pathology and general therapeutics for the third year. Special pathology, special therapeutics, the philosophy of medical history, jurisprudence and ethics for the fourth year. A fifth year may with advantage be devoted to clinical experience under supervision.

Medicine has no need to rear its superstructure on any other foundation than the broad basis of fact. It has been dragged to the level of common place occupations by the dissensions incited by the dogmas of theorists. When all physicians stand on the plane of higher medicine, there will be less tendency to diverge into extremist classes.

Is our estimate of medicine visionary and have we sought the impracticable? Must we silence our voices because few care to hear, and cease our efforts because the task is difficult? Must we tread the beaten track, lest

we offend prejudices, antagonize pecuniary interests and upset established orders? Not on this account shall we hesitate, if the truth be with us. The ethics of medicine rightly denounce fraternity with charlatans and quacks. Is the dishonor less if we degrade a noble profession by admitting to its rights and honors those who are ignorant, illiterate and incompetent.

THURSDAY. MORNING SESSION.

The Academy was called to order at ten o'clock.

The following resolution was adopted:

Resolved, That a committee of three be appointed by the President to report at the next annual meeting, instructed to prepare a statement of the best preliminary education for medical students, and also a statement of the minimum attainments which medical schools should require of students before admitting them to the study of medicine.

It was also resolved to appoint a committee of two whose duty it shall be to report the requirements for a preliminary education of the various medical colleges in the United States and in Canada.

The following officers were elected for the ensuing year:

President, Dr. R. Stanbury Sutton, Pittsburg, Penn.

Vice-Presidents, Drs. Lewis P. Bush, Delaware; S. J. Jones, Illinois; R. L. Sibbet, Pennsylvania; and F. H. Gerish, Maine.

Secretary and Treasurer, Dr. R. J. Dunglison, Philadelphia, Pa.

Assistant Secretary, Dr. Charles McIntire, Easton, Pa.

Pittsburg was selected as the next place of meeting. The time, the third Tuesday of September, 1886.

[TO BE CONTINUED.]

CORRESPONDENCE.

London, October 23rd, 1885.

Editor Review: The Harveian Oration which has been delivered almost regularly since Harvey's death was given by Dr. Quain on Monday last at the College of Physicians, and will appear in full in the medical journals of this week. In one respect it was rather a failure; the room in which it is delivered (the library of the college) is not a suitable one, and the lecturer was badly placed towards one end of it; then, again, there was a tremendous crowd, and men kept on coming in long after it had commenced, so that those present had the greatest difficulty in hearing. Dr. Quain set himself the task of inquiring why the profession is not held in more esteem in the public mind than it undoubtedly is, and he attributes this partly to the fact that for many centuries, when the rival theories of the different schools were being fought out, the public, seeing how the doctors differed on every conceivable point, could not but feel skeptical as to their capabilities if not indeed as to their honesty. Amongst other reasons he gave the natural credulity of the human race, who are always ready to run after the wonderful, and, on the other hand, the obstinate incredulity which always characterizes a certain proportion of the masses. He looks forward to the time when the advance, especially in a therapeutical direction, of medicine shall have caused the profession to be much more highly esteemed than is at present the case.

At the first meeting of the Clinical Society the surgeons had matters almost entirely their own way. Mr. Clement Lucas described two cases of strangulated umbilical hernia, treated by excision of the sac and skin covering with suture of the ring; both his patients recovered, though in both some suppuration took place, and in one there was sloughing; in neither instance did the suppuration extend to the peritoneum, a result which he attributed to the suture of the ring. Both were females, and neither of them favorable cases for operation, one being exceedingly obese, and the other the subject of heart disease and ascites. Several surgeons joined in the debate, the younger men approving of the treatment, the older, whilst thinking it may have been suitable in the cases before them, deprecating its adoption as a general plan. The other paper that evening was by Dr. Symonds, and was directed to a consideration of the proper treatment to be adopted when the middle meningeal artery has been ruptured. In the case which formed the subject of his paper he had trephined to relieve the compression caused by a clot resulting from the rupture of the artery, and had experienced much difficulty in getting at the bleeding point in the artery and satisfactorily controlling the hemorrhage. He suggested that in dealing with such a case the first thing to do would be to compress the carotid artery, and after trephining, if the bleeding could not be arrested, he would tie the external carotid. Mr. Howse promised to bring some similar cases before the Society at a future meeting.

The Pathological Society held its first meeting this session on Tuesday last, October 20, when there was a very large attendance of members. The specimens shown were numerous, but very miscellaneous, and none of them particularly rare. Dr. Dickinson showed a skull with sarcomatous tumors, originating probably in the deep-

er layers of the pericranium; it was taken from a boy aged 12 at the time of his death, the clinical features agreeing very closely with those of several that have, within the last few years, been brought before the society.

Dr. Hale White had a case in which gall-stones had made their way out of the gall-bladder and formed a sac for themselves in the wall of the pylorus which, becoming much thickened, had caused the death of the patient with all the symptoms of pyloric obstruction. Mr. Barker showed a case of lympho-sarcoma of the tonsils, believing it to be a rare affection, when, as is so often the case, it appeared to be well recognized in the experience of many speakers, all of whom agreed that treatment was futile. Dr. Savage brought an interesting specimen forward, but no one was able to throw any light upon it; it was a bladder from a case of general paralysis of the insane, which was much thickened and contained villous-like fringes; during the last few weeks of his life had been passing blood per anum, the kidneys were in the condition commonly described as "surgical."

The subject of canine rabies has been attracting a good deal of attention here of late, and with good reason, for the deaths from hydrophobia in London this year already exceeded those recorded in any previous year, not even excepting 1877, when the large total of sixteen was reached. Muzzling all dogs is no doubt a measure to which objection can be taken on various grounds, but it is the only measure of real practical utility that we are acquainted with, and if the present rate of mortality is continued, it will certainly become the duty of the Home Secretary to rigorously enforce it. In Germany the most brilliant results have followed this rule being carried into effect, and the disease has consequently been completely stamped out. Of course, M. Pasteur's scheme for preventive inoculation would do just as well when once it has proved to hold good universally, and has been brought within the range of practical utility, but we must not wait indefinitely for it.

I learn that at a meeting of the College of Physicans yesterday it was agreed that it was desirable that facilities should be given for acquiring a degree in medicine in England greater than those which at present exist, and it is possible that the conjoint board of the Colleges of Physicians and Surgeons will institute a special examination for the purpose, but the scheme is as yet chaotic.

Yours, etc.,
R. M.

—The Transactions of the Missouri State Medical Society are now ready and all who desire to have them can secure a copy by addressing Dr. Brooks of Carthage, Mo., enclosing one dollar. □

ITEMS.

—Pomade for Pruritis Vulvæ:—

℞ Zinci oxidi, - - - 25 grams
Acidi salicylici, - - - 1 gram
Glycerini amyli, - - 25 grams.
M. Sig.—Apply as needed.

—"Dentist's leg," is the latest addition to what might justly be termed the sensational nosological list, and is a fitting comparison to "lawn-tennis leg," its immediate ridiculous predecessor. It owes its parentage to Dr. George Johnson (Lancet, Aug. 15), who says it is due to perverted nerve functions, caused by compression of the nerves by firmly contracted muscles. The condition is aggravated by synchronous compression of the bloodvessels of the leg. It is a little surprising that we have not heard of the "pitcher's wrist" and the "catcher's thumb," the etiology of which is so well known to the lovers of the national game.—Medical Age.

—Remarkable Surgery.—A Berlin secular journal gives an account of a singular feat of surgery performed recently by Prof. Bergman of that city. Two cases presented themselves simultaneously to the professor's surgical clinic, one a necrosis of the humerus and the other an amputation of the femur. The necrosis of the humerus called for an extensive removal of dead bone-tissue, which Bergman supplanted by a large piece from the amputated femoral bone. Perfect success attended this certainly unique procedure.—Therapeutic Gazette.

—Harper's Magazine tells us that in a Western city lives an undertaker, by name Brown, a great wag, and always ready to play a joke; also a doctor who is a joker, and is always ready to tell on himself, and a "monument-maker" who is of the same kidney.

One day the doctor was driving at full speed down a business street when Brown spied him. Brown was in his wagon with the sign of his profession on the side. Whipping up his horse, he came as close to the doctor as possible, and glancing around, he spied the monument-maker. Calling to the monument-maker to hurry up, Brown called out: "Go on, doctor, go on; were comiug."

The doctor looked round, and dismay was pictured on his countenance. He whipped up his horse but all to no purpose, the undertaker and the monument-maker following closety. At last the ridiculous part of the thing struck him, and leaning back in his buggy he gave vent to his laughter, in spite of the thought, "What a sign for a prominent physician this is!"

THE WEEKLY MEDICAL REVIEW.

MEDICINE AND SURGERY.

VOL. XII. No. 21. CHICAGO AND ST. LOUIS, NOVEMBER 21, 1885. TERMS: $3.50 A YEAR.

RADICAL OPERATION OF HYDROCELE.

In No. 43 of the current year of the Central blatt fuer Chirurgie, is to be found a discussion of the considerations that speak for and against the treatment of hydrocele by incision. Koenig, of Goettingen, writes unreservedly that he is of the opinion that puncture of the sac and injection is the normal operation for the general sum of cases and in the general routine of practice. Numerous cases of treatment by this method prompt Koenig to state that no serious inconvenience should follow, and not more than a week of cessation from work is requisite after the procedure. He believes that suppuration and sloughing should not be set down as a fault of the method but of the operator. Most scrupulous cleanliness should be exercised, and the manipulations done with deftness and care.

The objection that returns of the accumulation ensue is true, but a second puncture and injection usually suffice to make the cure a permanent one.

Koenig admits that the methods by incision and drainage are of a positive result and safe when done strictly under antiseptic conditions. But in general practice the imperfections and necessary shortcomings in the latter respect make the radical operation a grave undertaking.

These remarks were elicited by the publication in No. 14 of the Berliner Klinische Wochenschrift of a modification of Volkmann's method. It appears that after this operation, which consists in splitting open the sac, drainage and suture, that an imperfect agglutination of the several layers of the tunics of the testicle and spermatic cord may follow; thus the tunical cavity is not completely obliterated, and reaccummulation of fluid may take place in the open space.

To obviate this failure at occlusion, Bergmann incises the sac, and then dissects the parietal layer of the tunica vaginalis off from the tunica communis and the spermatic cord down to the testicle and epididymis and cuts it out entirely. In twenty cases so dealt with the dissection with the handle of the scalpel was easily accomplished. Suture of the skin and drainage end the operation, which lasted a half hour on the average, including narcosis and dressing.

The convalescence was perfect and rapid. The drainage tube is removed at the first change of dressing, 24-48 hours after the operation; the sutures are taken out on the fifth or sixth day and a simple suspensory dressing then applied. After ten or twelve days the patients were enabled to go back to work.

ANTIPYRINE AS A HEMOSTATIC.

Huchard and Hénocque have lately described a quality of antipyrine which has not heretofore been known. On the ground of practical and experimental observation, they assert that antipyrine is a hemostatic. After removing successively three toes from the foot of a guinea-pig, the bleeding was arrested in nine minutes by dipping the wounded member into a perchloride of iron solution, in five minutes by an ergotin solution of five per cent, and in four minutes by an antipyrine solution of the same concentration. Secondary hemorrhage occurred with the iron and with the ergotin, but none whatsoever in the toe dipped in antipyrine.

More serious hemorrhage from large vessels was also promptly checked by the topical use of antipyrine. In a rabbit the femoral

artery and vein were severed; the bleeding ceased after applying a tampon saturated with antipyrine solution. Upon man similar results were obtained. Thus a case of epistaxis was promptly arrested by plugs of cotton saturated in antipyrine solution. Hemorrhage from a scalp wound and an injured finger was checked at once by sprinkling antipyrine in substance upon the surfaces.

How this hemostatic action is brought about can not be readily explained. It appears that the internal administration of the drug is followed by a dilatation of the cutaneous vessels.

Warburg's Tincture.

In reply to an inquiry by a correspondent we give the following formula as reported by Dr. Warburg in 1875:

℞	Socotrine aloes, - -	lb. 1.
	Rhubarb, E. I., - -	℥4.
	Angelica seed, - -	℥4.
	Confect. of Damocratis, -	℥4.
	Saffron, - - - -	ʒ2.
	Fennel seed, - - -	℥2.
	Prepared chalk, - -	℥2.
	Gentian, - - - -	℥1.
	Zedoaria, - - - -	ʒ1.
	Cubeb, - - - -	℥1.
	Myrrh, - - - -	℥1.
	Camphor, - - -	℥1.
	White agaric, - - -	℥1.

This mixture is to be digested in 500 ounces of proof-spirit in a water-bath for twelve hours, then expressed and ten ounces of quinine sulphate added. The mixture is then replaced into the water-bath, till the quinine is dissolved. The liquor when cool is to be filtered, and after bringing up to 500 ounces is ready for dispensing.

A "modified" Warburg's tincture is prepared by Fairchild Bros. & Foster. Instead of $9\frac{3}{5}$ grains of the sulphate of quinine, each ounce contains $3\frac{1}{5}$ grains each of sulphate of cinchonia, sulphate of cinchonidia and purified chinoidine.

Bois Piquant or Xanthoxylum, a New Febrifuge.

From a note in the Berliner Klinische Wochenschrift we learn of a new vegetable substance, lately introduced into France under the name of bois piquant, that possesses antifebrile virtues. It is a bark derived from Xanthoxylum Carribæum Lam. (Xanth. Clava Herculis Linn), and Xanthoxylum Perrottelli. In the Antilles the plant is known as Clavalier jaune or épineux, and has been employed by the local physicians as a febrifuge.

It appears that Heckel and Schlagdenhauffen (Compt. rend. Tom. xcviii) have isolated a crystalline alkaloid, which in aqueous solution in a dose of 0.005 grm. produced a reduction of respiration and heart action in the frog, and ultimate general paralysis and death.

The bark has been therapeutically employed in Marseilles.

Pneumonia Treated by Intra-Parenchymatous Injections.—The Medical Age quotes the Lancet:

"Boldness may certainly be necessary for success even in the treatment of disease. But what shall we say of Lépine's argument in favor of the local treatment of fibrinous pneumonia by intra-parenchymatous injections? (L'Union Médicale, Aug, 22d). If, says Lépine, an injection of a few cubic centimers of a very weak aqueous solution of corrosive sublimate be made into the hepatized lung on the third or fourth day of the disease, in three or four places equidistant a few centimeteters from one another, and preferably at the periphery of the lesion, with a view of preventing the extension of the disease, the following phenomena are observed: (1) At the seat of infection an immediate diminution of the crepitant râles and tubular breath-sounds, which are in part replaced by respiratory silence and some larger râles; (2) sometimes later, a transient exacerbation of the temperature of body; (3) the next day a great improvement in the general condition, and notably a precocious defervescence; and (4) a resolution which, to judge by the persistence

of the "souffle," especially in the hepatized parts that have not been treated, takes place very much earlier than would have been the case under ordinary circumstances. As to the relative innocuousness of the intra-pulmonary injections in the doses employed (20 to 25 cubic centimeters of 1 in 40,000 solution of bichloride of mercury), when care is taken to keep away from the large vessels at the hilus of the lung, and not to penetrate the lung more than three or four centimetres, M. Lépine urges that he has not lost a single patient and has not had one accident. The only inconvenience is the pain, but this is not great, and may be still further relieved by adding morphine to the solution. After the introduction of the sharp needle, and before the syringe is fitted on, a few drops of blood are allowed to escape; the injection must not be delayed or the needle will become plugged. When the needle is inserted into healthy lung or into tuberculous lung it does not as a rule yield blood. In the healthy lung such injections produce sufficiently defined lesions. Experiments on the lungs of healthy hogs showed that at the site of injection of a rather stronger solution than that mentioned above there was a circumscribed and indurated area, which was made up of blood and congestive edema. The lesions were less marked with the 40,000 solution."

Relation of Hygiene to Practical Dentistry.—Dr. C. E. H. Phillips, writes in the Independent Practitioner: "The great advance made in recent years in treating diseases of the mouth is certainly encouraging, and though excellent results are by no means uncommon, we should not rest here. Patients must be so instructed as to aid us in our endeavors, and not until they are impressed with the importance of the hygienic care of the mouth is our duty fully performed. The unwarrantable neglect of many patients in this regard is astonishing.

The physician, who by careful treatment and strict enforcement of sanitary laws has stamped out from a family or community the scourge of malignant fever, with precautionary instructions as to ventilation, diet and hygiene, for the protection of its other members, would at least feel discouraged, and justly so, should a recurrence of the disease result from gross neglect of sanitary conditions, or carelessness as to instructions given.

How very often is the dental practitioner subjected to like discouragement. Having corrected diseased conditions in the oral cavity, carefully cut out all carious dentine and nicely filled the cavities, removed accumulated calculous and mucous stains from the teeth and polished their surfaces, resulting not only in a pleasing appearance, but to the operator the consciousness of having performed saving work and aided the general health, and after faithful instruction as to thorough and careful use of the brush, with a good dentifrice, at proper periods, the employment of waxed floss silk and quill toothpick, is it to be wondered at if a feeling very near to disgust is experienced, if in a few months or a year the patient presents himself with tartar already forming in quantities, the teeth yellow from mucous attachment, the gums soft and spongy, ready to ooze blood from their gingival edges upon the slightest touch, all evidencing little care or use of the brush, or, possibly, its total disuse and general disregard to common hygienic requirements?

There is no question that the great essential to a healthy mouth, wholesome saliva, and pure breath, is cleanliness. Not until the dentist is able to force upon his patients the necessity of thorough cleanliness of the mouth at all times, and has their assistance to this end, shall we save teeth and keep the surrounding tissues in a state of health, and not until then should we rest satisfied."

The Infectiousness of Pneumonia.—Says the Medical Record:

"Dr. R. Massalongo relates the history of a curious epidemic of pneumonia, occurring at Tregnago, a town of two thousand inhabitants in the province of Verona, Italy (Lo Sperimentale, August, 1885). The epidemic was not preceded by any special atmospheric

changes to which its origin could be attributed, but began in a few houses situated near a pond which served as a place for washing clothes. In most of the houses there were from two to five cases, and the disease attacked the inhabitants of one house after the other in regular succession, never leaping over any. No special predisposition was shown as regards age, sex, or social condition. Of the inhabitants of the hamlet, one hundred were attacked with pneumonia during the epidemic, and thirty died. Numbers of micrococci, such as those described by Klebs, were found in the sputa, but no mention is made of the so-called pneumococci of Friedlænder. The course of the epidemic would seem to point to the presence of a contagious influence, yet there are so many other possible explanations of the peculiar march of the disease, that it cannot be regarded as a very conclusive argument in support of the theory of infection."

Case of Rupture of Bladder; Death From Hemorrhage.—C. Emilius Thompson of South Australia reports the following remarkable case in the British Medical Journal:

"J. W., a lad aged 15, was brought to my house from his home, a distance of two miles, on March 19 last, at 9:30 a. m. I was informed by his parents that he had gone to bed on the previous evening between 10:30 and 11 p. m., after making a good supper, being then in good health and spirits. About an hour afterwards he came to his father and complained that he was in great pain and unable to pass urine. He had passed urine at 10 p. m. freely. By much straining he did pass a few drops mixed with blood. Nothing was done for him, and he continued to suffer great agony, a few drops of pure blood escaping per urethram in the course of the night. When I saw the patient he presented all the symptoms of having suffered from profuse hemorrhage. His face was blanched, pulse small and fluttering, respiration somewhat hurried, and there was intense thirst. He complained of great pain over the lower part of the abdomen, and stated that he had been unable to pass urine since the previous evening before going to bed. The hypogastric region was somewhat prominent and unyielding. Dullness on percussion extended from the symphysis pubis to the umbilicus. No sense of fluctuation could be obtained by palpation. A No. 9 catheter was passed without difficulty, and a few drops of venous blood drawn off, unmixed with urine. Stimulants were administered, and the boy was carefully removed to his home, where, after a delay of an hour and a half, he was placed under ether and I performed the median operation for stone (Dr. W. P. Nesbitt assisting), with the view of exploring the bladder, and removing the blood-clot with which we supposed it was filled. On introducing the finger into the bladder as far as possible and syringing with warm water, the true nature of the case became apparent. A small quantity of partly clotted blood was washed out, but the water soon returned almost colorless. The smooth mucous membrane of the neck of the bladder could then be recognized by the finger. A catheter was introduced through the wound and tied in. The patient succumbed six hours after the operation.

A post mortem examination was made twenty-one hours after death. Rigor mortis was marked. There were no external marks of violence. On cutting through the abdominal wall in the median line a firm layer of blood-clot of very dark color was exposed, extending in a somewhat pyramidal shape from one inch below the umbilicus as far as the symphisis pubis, the apex being towards the umbilicus. The blood had infiltrated between the abdominal wall and the parietal peritoneum. There was no blood in the peritoneal cavity. The pelvis was full of venous blood, in great part clotted, especially around the bladder, the walls of which were thickened by adherent clot to the extent of three-quarters of an inch beneath the peritoneal investment. There was no odor as of urine mixed with the blood. Owing to the quantity of firmly clotted blood in the pelvic cellular tissue, it was impossible to obtain a view of the bladder in situ; and, in the process of removing the organ, it tore slightly with the

moderate traction made on it in raising it from its attachments. It was contracted and empty. The mucous membrane was smooth, of a dusky pink color, but otherwise healthy. The outer surface of the bladder was almost completely surrounded by firm adherent clot. There was a rent, about two and a half inches long, commencing in the base of the organ near the neck and extending upwards and to the left. The rest of the organs of the body were anemic, but otherwise healthy.

Remarks.—The case was one of unusual difficulty of diagnosis, owing to the absence of any history, either of violence or previous illness. Both the boy and his parents denied all knowledge of any cause for his condition. The singular direction taken by the extravasated blood gave rise to physical signs compatible with the supposition that the bladder was distended with clotted blood, while the history of the previous eleven hours, of a constant desire and inability to micturate, together with gradually increasing faintness and pain in the hypogastrium and at the end of the penis, and the results of catheterism, were not incompatible with such a condition. On the other hand, it was difficult to imagine a natural cause for such a hemorrhage occurring into the bladder of a lad of 15 without any previous warning or ailment whatever. Though it was impossible to obtain legal evidence of the fact at the inquest, it is practically certain that the boy was knocked down by a man with whom he was quarreling, immediately before he retired to rest; and the presumption is, therefore, that he received a blow or kick in the belly, or fell upon a stone or a log of wood. The close relationship of his assailant affords ample reason for the boy's persistent denial of his having received any injury. It is to be regretted that the exact measurement of the original rent could not be ascertained, but I am of opinion that it was not enlarged to any great extent at the post mortem examination. Such profuse hemorrhage is probably unusual in the rare accident of rupture of the bladder, and, with so much internal injury, the complete absence of external marks of violence is noteworthy, even bearing in mind the yielding nature of the abdominal wall; and this absence is rendered further remarkable from the fact that the injury must have been sustained at a time when the bladder was comparatively empty."

The Cholera in Spain.—The British Medical Jonrnal correspondent in Valencia writes, under date October 15, 1885:—Although the city and province of Valencia are now completely free from cholera, still there are several centres where it is making havoc, namely, Barcelona, Jaen, and some of the towns near Malaga, and in Logrono, in the north; but the city that heads the list of attacks and deaths is Albecete, into which the disease seems to have leaped in the last three days, attacking eighty-one, and killing forty-two. It lies on the line of rail between this and Madrid, and on the confines of the provinces of La Mancha and Murcia. Fortunately, all these three provinces are sparsely populated, and the towns and villages very far apart; so that I think there is little danger of its spreading much from the above centre. A few days ago, twenty-six laborers started on foot in a band from Alameda, province of Malaga, to look for work at the mines of Rio Tento. They walked as far as Rodo, but were not allowed to enter it. They passed on to Gariotelas de Franco, where five or six were seized with cholera. When the authorities came out with relief, they found three dead. The rest all fled, and passed on to Pedrera, where others shared the same fate; and, still further on, others died also. Out of the twenty-six, four or five escaped. In the little town of Barraix, 113 cases occurred in one day, and twenty-eight deaths (this town is in the province of Albacete).

I forgot to mention in my last about the malignancy of the attack on the wretched and all but abandoned lunatic asylum of Bandilio de Llobregat, near Barcelona, with its 700 inmates. I send you a relation of the state of affairs as given by the Suplemento of Barcelona. When cholera first broke out there on October 2, "the building was almost entirely abandoned by the whole staff,

although containing nearly 700 patients. The rooms set apart for a cholera-hospital are most unsuitable; all are exposed to the open air while the patients are seriously ill; all the lunatic inmates are in direct and immediate communication with the infected; the result being, that a large proportion are down with the epidemic. The mortuary is a stable, and there, amidst old timber, ladders, and mason's tools and straw, are found five or six corpses, one on the top of another. The dormitories are quite inadequate, without water-closets, the only substitute being a kind of dish for general use; the pharmacy is utterly destitute of all remedies; the director has fled; and although the manager begged for help of any and every kind, not even a stove for disinfection was sent, nor any resolution taken for the much needed aid. After careful examinations of the rooms and offices, nothing was found in keeping with the progress of science."

The Sanitary Board of the city has very wisely decreed that a circular order be sent to every city, town, and village of the province, strictly forbidding the entry of any one to the cemeteries on "All Souls" day, in consequence of the vast number of bodies interred in them since cholera broke out, and where contagion is still in its highest state of concentration. In view of the excellent state of public health here, the service-carriages and different apparatus for conveying the sick and dead are done away with, as also the various stations for medical help and succor, and the hospital of San José closed. To crown all, and prove to the whole world that we are well, happy and luxuriously prosperous, the Te Deum will be chanted in the Cathedral with great pomp next Sunday, and a great military high mass performed in the Alameda, with four days' "fiestas" of all kinds, processions of the "Virgin of the Destitute."

We have just gone through a scathing "poniente" gale from the west, which is a land-wind most trying and depressing. It began on the 8th, and ended on the 13th instant. The temperature was, maximum, 74°; minimum, 68°; wet bulb, 11° of evaporation, which is very high for this otherwise moist quarter. To-day, with wind E. by N., temperature, maximum, 62°, minimum, 56°, evaporation, 5°, delightfully bracing, and coldish but clear.

In my last letter I sent you a summary of the last commission on the Ferran question. I now send you in full the conclusions of the Commission, as published in all the papers. They are as follows: 1. The so-called prophylactic inoculation against cholera morbus cannot be considered as harmless to the individual, judging from the general and local effects produced in by far the greater number of the inoculated. 2. There exists no proof demonstrating that the liquid used for inoculation is a culture of the comma-bacillus, attenuated. 3. There is no criterion regulating the practice of inoculation, either in the choice of liquids to be used for establishing the relation which ought to exist between quantity and quality on the one side, or in individual considerations of the subject inoculated; the only governing rule being the most absolute variety in the richness of the cultivations in the broths used. 4. If the principle of Dr. Ferran's method, based on the doctrine asserting the comma-bacillus to be the effectual cause of cholera be accepted, he must also admit that the person inoculated can transmit it to others by constantly carrying about in his clothes and person the above-named micro-organism, thanks to the defects of his procedure in inoculation. 5. The conjoint symptoms presented by the inoculated cannot be regarded as characteristic of experimental cholera. 6. The person inoculated, during the first few days after the operations, is very liable to contract any malady, but especially cholera, when there is an epidemic; because inoculation destroys, more or less, the physiological equilibrium necessary to be maintained during periods of epidemics. 7. As regards the effects of inoculation, and the experiments practised by the Commission, there is no proof that Ferran's method can produce immunity from cholera, neither is it posible to obtain any conclusion,

in this sense, from the figures of the statistics drawn up, as no general law should be deduced from isolated so-called facts.

Of course the Ferranist papers are wild with indignation at the above result. The Epoca of Madrid demanded statistics. The simple answer is, that they will be published in La Gaceta, and I think the Epoca and all the Ferranist papers, with their supporters, will be much surprised and chagrined when the now searching figures do appear. The Provincias says that the report ought not to be accepted, in so far as the prophylactic power and the innocuity of the inoculation are concerned, as statistics prove the reverse, and that the first commission was composed of more capable men, etc."

Professional Fees--Legislation Needed. —The following remarks by Dr. A. A. Moore, of Camden, S. C., in his address as President of the South Carolina Medical Association, last April, are contained in the Virginia Medical Monthy and will find many a sympathizing reader in other States, and earnest wisher that what he advocates were an accomplished fact. He says:

"It is generally conceded, and it is true, that the crowning charm of medicine is, that it is preeminently a benevolent profession. The motives for its study and practice should rise superior to mere mercenary considerations. The fees that are often grudgingly tendered are only honoraria, and are not quid pro quo for services rendered. They are, as we fully realize, totally inadequate to the sacrifices of comfort, of ease, of health, and often of life itself, which we are required to make for the benefit of our fellow-creatures. To all this we willingly assent. But at the same time, like the rest of mankind, we are but flesh and blood. We have bodies to clothe and feed. Like other men we have families to provide for. Now I ask, when these domestic cares are pressing upon us—when these imperative and incessant demands for the absolute necessaries of life have to be met—are we not unfitted in a large measure for the efficient and successful discharge of our duties? As my predecessor has so strongly and tersely expressed it: "The res angusta domi admits of no compromise." This is a constant and embarrassing difficulty that peculiarly besets the pathway of the country practitioner, and impairs his usefulness to his patients, to his profession and to the public. Is it not often true, for example, that the services of the country doctor, so promptly and so cheerfully given to the laborers of the large planter, become the very means by which he is enabled to till his broad acres, and to fill his garners with the staff of life? And yet how frequently it is the common experience of us all to be quietly informed at the close of the season that the laborer's wages are all consumed, and nothing is left for the helpless doctor! Without intended irreverence, and with a slight alteration of Biblical language, we can then literally say, "The harvest is past, the summer is ended, and we are not"—paid. They are difficulties such as these that fetter the zeal and energy of the struggling physician. He cannot perhaps even procure the necessary medicines for his daily work; he cannot supply himself with any of the improved surgical appliances; he cannot subscribe for medical journals and new books, and thus keep abreast of the rapid and ceaseless progress of medical science.

Often this very indigence hinders him from uniting with this Association, and participating in the benefits that flow from it. Is there no remedy for this evil? Can no relief be afforded to the hard-worked and half-paid physician by legislative enactment? The landlord is secured for his rents, the merchant for his advances, the lawyer for his fees, and the common laborer for his wages. Why then, I ask again, should not some proper protection be guaranteed the physician? Is he not clearly entitled to his modicum of common justice? All classes of the community will readily admit his claims for a proper remuneration; but as the poet has homely expressed it:

"God and the doctor, men like adore,
Just at the brink of danger—not before;
The danger is past, both alike requited,
God is forgotten, and the doctor slighted."

Now, assuming what I have said to be true, is this grievance of sufficient moment as to demand redress? and if so, how is it to be sought? As we have already seen, several years ago, the isolated effort of a single county society to rectify it will p s s entirely unheeded. The only way, then, that relief can be obtained, if at all, is by the organized and authoritative action of the Association. With a view to this end, I would therefore respectfully recommend that such measures be devised as the Association may deem wise and practicable, whether it a be petition to our State Legislature, or otherwise.

In this connection, permit me to call your attention to a hardship which the law imposes upon the physician, and which bears especially heavy upon the country physician. We are not unfrequently summoned ten or fifteen miles to attend a coroner's inquest. The circumstances surrounding the murder or sudden death, as the case may be, are such as to make a careful dissection absolutely essential. Perhaps, our limited experience not having fitted us for the speedy and skilful execution of the task, it may require several hours to accomplish it. We are thus called away from our regular duties, at the sacrifice of time, labor, and probably of more pleasant and lucrative employment, besides incurring the personal risk of septic poisoning; and for all this, exclusive of mileage, as the law now stands, we are allowed the large fee of ten dollars. But the trouble and injustice do not terminate here; for of course we are next subpœnæd to attend court as expert witnesses, where we may possibly be detained a whole week, and for our testimony we receive no higher compensation than ordinary witnesses. In the language of the Code of Ethics, "Medical men should always be ready when called on by the legally constituted authorities, to enlighten coroner's inquests and courts of justice, on subjects strictly medical, etc. * * * But in these cases, and especially when they are required to make post-mortem examinations, it is just, in consequence of the time, labor and skill required, and the responsibility and risk they incur, that the public should award them a "proper honorarium." Now I ask, if the paltry sum I have just mentiened, is a "proper honorarium?" Is not the enactment of this law a piece of poor and mistaken economy? Is not its tendency to deter physicians from the thorough performance of such public duties, and thus to defeat the ends of justice, instead of promoting them, the very object for which the law was created? Is it not obviously unwise and unjust to impose a responsible and onerous duty upon the profession, and then refuse an adequate compensation? It unquestionably is. It appears to me, then, neither inconsistent with the spirit of our calling, nor with the dignity of this Association, to demand a proper pecuniary recognition for our services. I would therefore respectfully suggest that this matter also be brought to the attention of our Legislature, with a view to amendment."

English Hospitals.—The Canadian Practitioner writes:

From the educational number of the British Medical Journal we can get a great deal of information about British medical teaching and examining bodies. The fees in some of the London hospitals are high. The composition fees for all lectures and hospital practice required by examining boards in St. Bartholomew's, St. George's, and University College is for each six hundred and fifty dollars. The lowest fee in London is that of the Charing Cross and the London, viz., four hundred and seventy dollars. In all cases the hospital and medical schools are under the same management.

The London hospital has 800 beds; St. Bartholomew's, 750; Guy's, 695; St. Thomas', 572; St. George's, 351; University College, 200; King's College, 170.

St. Bartholomew's will furnish a fair example of how they are divided. There are 227 beds for medical cases, 353 for surgical, 26 for diseases of the eye, 20 for diseases of women, and 75 in the Convalescent Hospital at Swanley.

The Britisn Medical Journal is not satisfied

with the position of London as a centre for advanced medical teaching. It says: "There is a constant stream of men still young, or in early middle age, returning to London on furlough. It is, unfortunately, too true that men of this class can find but few openings to turn their leisure to good account." After discussing the matter at length, it closes its articles as follows: "Meanwhile, cannot some effort be made to put the advantages which already exist more prominently forward, and to fill up the vacant places? The matter is eminently one for the consideration of the teachers and men of scientific attainments in the various departments. The want of funds, is, no doubt, one of great difficulty; but the want of organization and concentration of thought and work is greater. If a satisfactory scheme for the formation of biological laboratories for advanced students were drawn up and put before the profession, there would be a something to point to, and it is quite possible, nay certain, if sought in the right way, that funds would be found."

Strychnia in Diphtheritic Paralysis.—In the Deutsche Medicinische Wochenschrift for May, (Canada Lancet) Dr. Reinhardt, of Bautzen, relates the case of a boy aged three years, who after an attack of diphtheria, suffered from symptoms of paralysis in the muscles of the palate and various parts of the body, his gait being uncertain and staggering. Tonic treatment, including iron, was of no avail, and twelve days later the symptoms had advanced so far that death seemed imminent from paralysis of the respiratory muscles. Internal remedies were useless, as the power of swallowing was lost; recourse was therefore had to subcutaneous injection of sulphate of strychnia 1 milligramme (0.015 grain) daily. The next day the breathing was quieter and the muscles were less flaccid, and only fifteen doses were required to establish convalescence on a firm basis. No unpleasant symptoms were set up by the strychnia. Dr. Reinhard mentions this case, not as anything new, but as bringing an old remedy to the remembrance of his fellow-practitioners.

CONTRIBUTION.

TETANUS.

BY WM. A. BYRD, M. D., QUINCY, ILLS.

Read before the Mississippi Valley Medical Society, Sept. 9, 1885.

Mr. President and Gentlemen: Next to hydrophobia I know of no isolated, non-epidemic disease more dreaded, by both the physician and the patient than tetanus. A disease much more common in some districts than others, although the localities may be very near each other. It would be presumption in me to enumerate the symptoms of the disease to a body of gentlemen so well versed in the observation of disease as this is, but I wish to call your attention to the two distinct beliefs in its nature. One that it is humoral and zymotic, the other that it is a condition of reflex nerve irritation. Now if it was zymotic in its origin it should follow a more fixed course of symptoms than any cases that I have ever seen or had the pleasure of reading the records of. Take our well known zymotic diseases and we know the different stages come on regularly and progress with a certain precision in all cases. There may be cases much milder than others, but we never expect to see a case of small pox end in a week or to commence without certain definite initial symptoms. Such is not the case with tetanus. The initial stage may be all the way from one half hour to three weeks or even longer. The other view that it is a reflex nervous trouble may be substantiated by the irregularity of the time that passes for the disease to manifest itself. What the changed conditions of the nerves are at the seat of the injury has not as yet been ascertained, but I cannot refrain from thinking that pressure has something to do with it.

In all the acute cases I have seen there has been an undue amount of tumefaction existing in the wound, and in the chronic cases the cicatrix has been unusually dense. In all the acute cases I have seen it has been my practice to incise freely in the neighborhood of the initial lesion, removing, if I think necessary, some of the tissue to allow for swelling; then I have kept the patient under the influence of chloral hydrate and bromide of potassium to relieve them of the agony that they endure, and for the purpose of acting permanently upon the spinal cord. I have at the suggestion of the late Dr. John T. Hodgen, given large doses of Fowler's solution

I remember one case. George Schnell, of our city, a teamster, a few years ago, had his hand mashed; in a little while tetanus set in. He suffered most excruciatingly, the opisthotonos was extreme, he was bathed in perspiration, and lifting the window curtain to let in more light, or a heavy step on the floor, or a draught of air striking him would cause him to beg pitiously for some one to kill him and put him out of his misery. I gave him twenty drops of Fowler's solution every two hours for over a week, watching carefully all the time for any symptoms of arsenical poisoning that they might be met at once. No such symptoms appeared and he made a good recovery and is now driving his team daily on the streets. A few weeks after I had discharged Schnell, I was called to see Jos. Schaeppers, a young laborer, who had had his foot pierced by a large splinter. Lock jaw set in and, though not so severe as that of Schnell, I put him on the same treatment. In two weeks he was greatly improved but exposed himself on a cold rainy day and had a relapse and died.

In regard to the method of treating chronic tetanus, perhaps it will be just as well to report a case that was one of the most interesting to me I ever knew of. The morning of the 18th of July I met Dr. Rooney, the physician of St. Mary's Hospital, and he informed me that there was a case of tetanus at the hospital that had entered as a case of paralysis from a diagnosis that had been made at one of the public institutions in St. Louis. He further stated that the man had received an injury of the head. I set 4 o'clock in the afternoon as the time that would suit me best to meet him at the hospital and examine the man and see what we could do for him.

When I got to the hospital I found a well-nourished man, George Robertson, of about thirty-five years of age, with set jaws and spasms of all the muscles of the body. He stated that three weeks before while working on a bridge on the Iron Mountain R.R. south of St. Louis, he fell, striking his forehead over the right eye on a stone, that the wound soon healed, but in about ten days he began to get stiff, could not walk well, had difficulty in chewing his food, and at night would have spasms of the general muscles accompanied with excessive perspiration. This becoming worse he went up to St. Louis where his trouble was pronounced paralysis. Having friends up north and the outlook being so gloomy he determined to make his way to them, but when he got to Quincy he felt so much worse he stopped at a hospital. The case was a plain one of tetanus. The scar on the eye brow showed that it was recent and that it also involved the superior orbital notch. He was put under an anesthetic and the cicatrix cut away. As soon as the bone was reached a fracture was discovered. I applied the trephine and removed the injured bone and dressed the wound. As he recovered from the anesthetic he vomited and having by some means swallowed some large pieces of beef's liver they could not pass through his clenched teeth, so they took the next best direction, that of the least resistance, and went down the trachea. Then there was confusion, the attendents all declaring that the man was dead, and so he seemed. Right then I began to have a deep and abiding sympathy for the surgeon that loses his patient during an operation. I was entirely unprepared for a tracheotomy, with the exception that I had pressure artery forceps and tenacula out of the case as also a scalpel. I quieted them by telling them that it would take a man at least a minute to choke to death, and as I could perform tracheotomy in half a minute that we had plenty of time. I picked up the scalpel and laid the trachea open for at least half an inch below the cricoid cartilage, incising the superior thyroidal vessels. The flow of blood was appalling, but passing my finger into the trachea so as to lift it and the accompanying tissues, I raised the vessels on either side of the cut, seized them en masse with pressure forceps and stopped the hemorrhage at once. I then proceded to get the liver out of the trachea, which we easily did by holding the wound open with tenacula. The amount of liver taken out was fully as large as my whole thumb. After cleaning out the trachea I stitched, two stitches on each side, the wound in the trachea to the edges of the skin and fastened the ligatures to pieces of adhesive plaster and drew them back over the shoulder so as to hold the wound gaping.

A method introduced by one of the greatest and most original surgeons America has ever claimed, the late Dr. Henry A. Martin, of Boston. I pause here to call your attention to this method of performing tracheotomy because I have performed tracheotomy, and had the nurse, a physician, fall asleep and allow the tube to become blocked up with mucus and strangle the patient. That event has given me a horror of tracheotomy tubes in certain conditions. He was put upon chloral and five drops of Fowler's solution every two hours. In three or four days erisypelas set in, and involved nearly the whole face. That lasted for about a week when he got better. In about two weeks he was so much improved that I had him removed into a con-

valescent ward. His bed was so placed that he was in a draught. The next morning when I came to the hospital he was suffering with acute laryngitis, and I found it necessary to reopen the trachea to allow him to breathe. Not being prepared to hold the trachea open, as before, I took two hairpins and bent them into the letter S shape, and by tying tapes to one hook and putting the other end of the hook in the trachea, and tying the tapes behind the neck I succeeded admirably in holding the wound open. That looked so much like barbarous surgery that I brought out a large tracheotomy tube in the afternoon and, taking the hairpins out, replaced them with the tube, but when the patient coughed it would cause the mucus to block the tube and he would not tolerate it at all, but made me take it out and replace the hairpins.

These he wore for about a week; when the inflammation in the larynx had subsided they were taken out and the wound quickly healed. He went on to a perfect recovery and was dismissed from the hospital Sept. 15th.

P. S. Since writing the above Frank Cason, a five-year old son of Robert B. Cason, living nine miles west of LaGrange, Missouri, has been brought to me suffering from tetanus, the result of a fracture of the skull from the kick of a horse over the outer side of the orbital eminence. The fracture was undetected and the flesh wound healed over. Ten days afterward he exhibited strange symptoms and the physicians that saw him pronounced it a case of paralysis. When I saw him I detected, at once, lockjaw from depressed fracture of the skull. September the 25th, just two months after the first operation, I cut through the scar at St. Mary's hospital, with the assistance of Drs. Rooney, Woods, Rook and several medical students, and took out a depressed fragment of bone as large as the last joint of my little finger. The child is doing very well, becoming better as soon as he was from under the anesthetic. To-day, Sept. 28th, I met his family physician, and he tells me he is entirely well.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, Nov. 14th, 1885, the Vice-President, Dr. Jordan, in the chair.

CONGENITAL DERMOID TUMOR ON THE EYE. —PRESENTATION OF PATIENT.

DR. POLLAK, in presenting the patient, stated that he was 38 years old, and right after his birth his mother noticed a black spot the size of a coffee ground in his eye. The speaker saw him when 5 years old and suggested snipping it off, probably regarding it as a myocephalon. But this was refused. On the 8th inst. he was again seen and the tumor had developed in the meantime. It is situated at the limbus conjunctivæ, is conical in shape, the base 8 mm. in diameter and 3 mm. high, of a pale, whitish yellow color, smooth, and from its apex protrudes a stiff white hair one-half to two-thirds of an inch long. It is firmly rooted in the tumor and causes no irritation, unless it grows too long when it curves inside the lower lid and causes lachrymation. It must be removed about every three months. The hair is as often black as it is white. The eye is normal; sight good. Adjacent to the tumor is a crescent-shaped segment of a white color which may be either fatty degeneration or cicatricial opacity of the cornea. This tumor is doubtless dermoid. Dermoid tumors on the eye are not of frequent occurrence. Von Græfe exhibited one in his clinic in 1860. Wardrop mentions (Morbid Anatomy of the human eye) a case in which twelve long hairs grew from the middle of the tumor, not appearing until the sixth year. Dr. Talliaferro, of Kentucky, reported in the American Journal of Medical Sciences, 1841, a case where such a tumor existed on each eye. Excision furnished excellent results. In removing them care must be taken not to cut too deeply.

DR. ALT regarded the case as an interesting one, but not rare. He had examined four cases microscopically and the tumor was composed essentially of skin tissue. Removal is usually easy. He thought it strange that but one hair existed. There are generally several, and 2 or 3 will spring from the same bulb. The white crescent is fatty degeneration of tissue, such as we find accompanying pterygium.

DR. WILLIAMS some years ago removed quite a large dermoid cyst, which had a number of large hairs. When in Germany, he saw at Arlt's clinic a calf's eye whose entire cornea was occupied by a large number of hairs, the margin of the cornea being clear. He could see no danger in operating unless the surgeon cut through the cornea.

RETAINED PLACENTA—DEATH FROM HEMORRHAGE—SPECIMEN.

DR. THORNTON stated that yesterday morning a physician was summoned to a woman, who had just been delivered and was dyate. He found her dead, the child was well and the midwife who attended the case had just

left. The woman bled to death. The funis was torn from its placental attachment. A portion of the placenta had been obtained by the midwife. The coroner was notified and upon post-mortem examination it was found that a portion of the placenta had been left in the uterus as seen in the specimen.

Dr. Meisenbach thought the case interesting. In his opinion Credé's method would have probably prevented the hemorrhage. I was a common practice with midwives to give ergot when the uterus will not expell its contents. He cited some cases in illustration and gave the history of a case in which a part of the placenta remained in utero and the patient recovered in spite of the fact that the temperature was high (104°) and decomposition present. The indiscriminate use of ergot by midwives was a practice to be deprecated.

Dr. Green wished to know what harm ergot could do if administered after the delivery of the child. All it can do in a case of retained placenta is to cause hour-glass contraction. What is the difference between an ignorant midwife or a physician inserting his hands in the uterus or giving ergot?

Dr. Love said that the midwife should be taught cleanliness before putting her hand in the uterus. He detailed a case showing the greater danger of ergot as against the hand in utero properly applied. He regarded midwives as a danger and something ought to be done to protect women from meddlesome and ignorant midwives. Had a physician attended the case reported by Dr. Thornton, it would not have terminated as it did.

Dr. Atwood remarked that the danger of giving ergot after the expulsion of the child consists in the folly of depending upon the power of it. Nothing can be done to save a patient but the introduction of the hand and removal of the placenta in many cases. He then narrated several cases illustrative of the ignorance and culpable negligence of midwives.

Dr. Fry thought that one fact showed carelessness and that was that the cord was tugged at until it broke. He was not well posted but all the physicians he had met had noticed that midwives invariably pull at the cord to bring down the placenta. He had been frequently called in where midwives had succeeded in breaking the cord and it interfered a great deal with getting the bearings of the placenta in the womb.

Dr. Hendrix presented a specimen obtained from a woman who had been bleeding several days. On examination the os was found dilated. The ovum had been passed but placenta retained. With a placental forceps this was removed and the hemorrhage ceased. As is his custom he then washed out the uterus until the water came out clear, as an empty uterus will not bleed. In obstetrical cases his practice is to remove the placenta with the hand, if it does not readily detach, and he has never regretted having done so. There is no pain, as the parts are well dilated and sensation, to a great degree, obtunded.

Dr. Blount was astonished at the teachings of the last speakers. He had read of delivering rapidly, but these gentlemen will not give nature a chance in expelling the child, but also remove the placenta. Pieces are more apt to be left than if left to nature.

Dr. Rowland had delivered a good number of women, but had no cause to change his practice. Immediately after the delivery of the child, if hemorrhage is feared, he gives a moderate dose of ergot. He never puts his hand in the uterus if he can avoid it. If hemorrhage occurs he puts his hand well up to the fundus and scoops off the placenta. He has never lost a case by hemorrhage. There is danger in introducing the hand if it is not clean, and where nature will do its own work it is good practice to let it do so.

Dr. Hulbert inquired if Dr. Hendrix introduced his hand in the vagina or uterus in every case of obstetrics.

Dr. Hendrix said he did so only when necessary and hemorrhage threatened.

Dr. Hulbert could not see what the discussion would prove. He never interfered in a case that was going on normally. He wished to call attention to one point in regard to the specimen. The part of the placenta remaining in the uterus was adherent in its upper part and it seemed as if it could have been readily separated, and the reason it was not removed was that nature was not helped in the proper manner. It does not appear adherent. The speaker had had but one case of adherent placenta, and he literally dug it all out and the membranes also. It seemed as if inflammatory adhesion had taken place. Three days later a hemorrhage was stopped by curetting. The uterus was washed out as Dr. Hendrix stated he did.

Dr. Meisenbach asked if antiseptics were employed for the hands, etc.?

Dr. Hulbert stated that it was the practice, at the Female Hospital, to bathe patients upon entering and just before labor. Carbolized and sublimate solutions were used; the nails pared, cleaned and disinfected as also the instruments. No injections were given before labor unless leucorrhea existed or some other

condition necessitating it. After the delivery of the placenta a hot injection of sublimate solution (1 in 4.000) and the ergot mixture; six hours after delivery a second injection and dose of ergot mixture and the child put to the breast. From that on three injections and ergot mixture every twenty-four hours for six days.

Dr. Atwood did not think that there was any necessity for these injections and they are liable to provoke danger.

Dr Hulbert answered that the records of the lying-in-ward were better since this method had been carried out.

Dr. Atwood did not refer to hospital practice. He got along very well without these needless injections for thirty-five years and thought he could do so yet.

Dr. Prewitt said that pulling the cord to separate the placenta was reversing the process. It will not detach the placenta; the womb does that. The more you pull on the cord, the more liability is there to produce hemorrhage. It is unfortunate that we have midwives and it is also unfortunate that most physicians are not prepared for these emergencies. Ergot has no rôle in labor proper. Credés method will do in the large proportion of cases. Adhesions are inflammatory and the placenta is part and parcel of the walls of the uterus, and no harm is done by leaving a part unless hemorrhage is produced.

Dr. Hulbert thought that a genuine adherent placenta was a rare condition. Because a placenta did not readily come out, it was no evidence of being adherent.

Compound Fracture of Skull.—Presenta- of Patient and Specimens.

Dr. Hendrix was called on April 5th to see a little girl, aged 4, who had been hit in the head with the sharp edge of a hatchet. When seen she was in convulsions. The fragments seemed loose. Four hours after the accident had occurred the convulsions ceased and never returned. A bloody serum was trickling from the wound. The lower fragment was removed after dissecting off the pericranium and scalp. The other fragment was lifted into position and left. An iodoform dressing was applied and a cloth, dipped in cold water, over it. No bad symptoms were noticed except a weakness in the left hand and leg—opposite to the injured side; this has disappeared. After five days there seemed a deposit forming in the rest of the dura mater. Up to that time brain substance had been oozing out. On the seventh day the opening had closed and the deposit continued until it filled the cavity. In six weeks it was considerably above the scalp and, out of the mass, there projected the point of the bone which had not been disturbed. This was removed and the exuberant granulations touched, from time to time, with nitrate of silver. Last Tuesday there was a slight elevation, like a boil and a small piece of bone was taken out of it. The speaker did not know whether the fracture radiated and this was an exfoliation or whether a nutrient artery was cut off and caused necrosis.

CHICAGO MEDICAL SOCIETY.

Stated Meeting, held November 4, 1885. The President, C. T. Parkes, M. D., in the chair.

Nervous Paroxysm or Syncope,

was the subject of a paper read by Dr. H. T. Byford. He read the report of two fatal cases, which had not occurred in his own practice, and traced the cause of death to strangulation by medicine given during the paroxysms. The third case reported occurred in his own practice and recovered, no attempt at internal medication having been made during the paroxysms. After a recital of the cases, the author proceeded to describe this hitherto imperfectly recognized form of nervous paroxysm, which in the books and in practice, is often confouuded with true syncope, hysteria and other conditions, but which is in reality more in the form of convulsions.

In the cases which he had treated, the most common exciting causes lay in the digestive system, but he thought subsequent observations would demonstrate that the exciting causes might also be due to some disturbance of the cutaneous, osseous, sexual or urinary systems. The predisposing causes are debility, plethora, sudden change of habits, severe strains upon vital forces, parturition, functional or organic diseases, etc.

The author tabulated the symptoms occuring in true syncope and nervous paroxysm, as follows:

TRUE SYNCOPE.	NERVOUS PAROXYSM.
1. Often preceded by a feeling of oppression about the epigastrium, or nausea and general malaise. Patients feel the attack coming on.	1. Often preceded by nervous irritation, heaviness about the stomach, and frequent desire to take a deep inspiration (gaping); sometimes by a feeling of nervous exaltation, or equanimity greater than usual. Onset is usually sudden.

2. Pallor, vacant expression of countenance, and mental calm in the beginning, w th dullness of special and general sensation.	2. Pallor, anxious countenance, mental distress in the beginning, with acuteness of special and general sensation.
3. Muscular relaxation.	3. Muscular rigidity or activity.
4. Dyspnea, if any, not distressful—objective rather than subjective.	4. Dyspnea distressful—more subjective than objective.
5. Unconsciousn e s s absolute.	5. Seldom absolute unconsciousness, mental confusion or incapacity.
6. Unless fatal, attack passes away rapidly, especially if patient in recumbent position.	6. Passes away gradually, more rapidly if head and shoulders be elevated.
7. Temperature normal or below (unless elevated by disease).	7. Temperature normal or above.
8. Seldom recurs if head be kept low.	8. Usually recurs, or threatens to recur shortly, even if patient lie down.
9. Heart's action greatly depressed.	9. Heart's action irregular, spasmodic, and only moderately depressed.
10. Seldom very disagreeable recollections of distress during the attack.	10. Very disagreeable recollections of distress during the paroxysms.
11. Stimulants afford relief.	11. Stimulants aggravate.

Hysteria, uremia, the action of remedies, etc., may complicate and obscure the symptoms in any given case. The treatment calls for counterirritation, cool air, cold drinks, massage, antispasmodics, for the paroxysms; afterwards a removal of the cause, if possible, and measures for the restoration of good health.

Discussion.

Dr. J. H. Etheridge.—I would like to ask Dr. Byford what he would think of the use of hypodermic injections of digitalis under such circumstances; to ask if anyone has ever used it in cases of acute syncope; and why it would not be a good thing to make use of?

Dr. H. T. Byford.—In these attacks I think digitalis would perhaps hardly be the remedy, for the condition is one of reflex irritation, I think. I think it is a case of spasmodic contraction of the heart, and that any nervous symptoms are the result of a contraction of the arterioles of the brain rather than a falling off in the force of the circulation, and that stimulants, such as digitalis, would be liable to do harm. This class of cases I have considered really attacks of convulsions, in which consciousness is not lost, if such a thing can be admitted. In these cases consciousnes is not lost; sometimes there is a partial loss of consciousness, spasmodic contraction of the diaphragm, the breath almost entirely cut off, and I suppose the same spasmodic condition of the heart; and sometimes, and in some of the cases referred to, there was rigidity of the muscles, one patient trying to throw herself out of bed. In real syncope the attacks involve loss of consciousness, and relaxation of the muscles. Dr. G. Newkirk has informed me that he formerly treated cases of malaria wherein the onset was marked by symptoms such as have been described. These cases, occurring in a malarial district, were characterized by a foul stomach, due to the presence of acrid ingesta. Free voming, spontaneous or induced, nearly always gave relief.

Palatable Therapeutics

was the subject discussed ably in a paper read by Dr. Franklin H. Martin. He exhibited specimens of drugs manufactured in the form of pills, capsules, granular salts, elixirs, et cetera, either tasteless or palatable. In his paper, Dr. Martin claimed that many of the greatest improvements in therapeutics have been gleaned from the field of charlatanism. Electricity, message and the "Swedish movement" have been wrested from this domain, and placed upon a legitimate and scientific basis. The author claimed that homeopathic medication had three valuable characteristics, palatability, harmlessness and inexpensiveness to the patient. This combination, absolutely without medical merit, accounts for the so-called success of homeopathy. If we can secure palatability to our remedies, we will do much to overcome the popular aversion to our medicinal preparations. Since 1817, when morphia was first isolated as an alkaloid, a great advance has been made in discovering the active principles of drugs. Of the alkaloids there have now been discovered twenty-two, with actions similar to the parent drugs. They are manufactured in pill form and are more easy of administration than the disagreeable preparations from the crude drugs. Twenty glucosides have been similarly isolated and manufactured. While this branch of pharmaceutical chemistry is yet in its infancy we can confidently look forward to the day when the active principles of all the organic drugs will have been discovered, isolated and manufactured into palatable preparations. To-day, the salts of various metals, solid extracts, the bromides and iodides, chloral hydrate and the oils can all be administered in capsules. Dr. Martin claimed to be the first to suggest the enclosing in capsules solutions of chloral in oil.

We can summarize the means by which we make medicines palatable, as follows: The administration of alkaloids, solid extracts, crude drugs of small bulk, and various salts in capsules or gelatine or sugar coated pills; the administration of glucosides and neutral principles in gelatine or sugar-coated granules; the administration of tasteless liquids in water; the administration of oils, oleo resins, oleates and drugs soluble in oil in soft elastic gelatine capsules; and the administration of medicines by the hypodermic syringe, suppositories and inunctions.

DISCUSSION.

Dr. J. J. M. Angear. The object of the paper is certainly commendable. I think the latter part of the paper is valuable, where is urged upon us the necessity of discarding these nauseating remedies and availing ourselves of the science of chemistry, and we should take the admonition to ourselves. I think we are injuring ourselves and our profession by prescribing such crude material when we might avail ourselves of more modern and elegant remedies.

Dr. R. Tilley. There is an inference, of course, even more manifest than appears in the title of the paper which was read to us, that we are indebted more or less to the homeopathists for the advance we have made in the years gone by in the administration of medicines of a more palatable form. I claim, emphatically, that such is not the case. The advance which we have made in this respect is to a large extent due to our chemists, and we are willing to accord to them the credit which belongs to them, but we are not willing to accord this credit to the homeopathists. Certainly we have all taken this subject into consideration; we have all given morphine, atropia, etc., when desired. All of us have, I am sure, been trying our best to render these medicines as palatable as possible. There are, however, a few recommendations in the paper which I think would be most objectionable. For instance, I dare say few experienced men would dare to give iodide of potassium in large doses in capsules. I always recommend large quantities of water to be taken in connection with iodide of potassium. Then with reference to arsenic and antimony, we are told that they can be administered in solutions in teaspoonful doses. We all know that, but I question whether it is desirable. I have always recommended the administration of arsenic in large quantities of water, and also tartar emetic. As to the administration of chloral in oil in capsules, I think the Doctor can claim the credit and have all the honor associated with it. There is one thing that I would like to refer to, that is the administration of permanganate of potassium in capsule form. I have known it to be so administered in two or three cases, with very severe pain attending the administration, but I have never administered it in that way myself.

Professor J. H. Etheridge. I think the paper is a very timely one, it is full of a great many good points, but I think there is an objection to the administration of concentrated remedies, especially these alkaloids, in gelatine covers and sugar-coated pills. It sometimes happens that after they have been administered they do not dissolve, and then we get a terrific effect by a half dozen dissolving at once, and in some cases they do not dissolve at all. I recall a case where it was decided to give a child thirty-five grains of quinine; seven capsules were administered and three of them passed the rectum untouched. They may not always promptly dissolve, and the consequence is we run a very great risk of injuring our patients.

Dr. A. H. Foster. I am glad we have arrived at the point where our profession has learned to give less medicine, thus it is more palatable. Another thing, it is time that we began giving medicine more palatably by giving it in smaller doses, and we will often get a primary and not a secondary effect from our remedies, and will not get the terrible perturbation that we would if we gave large doses. some of us have to deal with very delicate stomachs; that class of my practice which is more in the middle of the west side is more delicate than on the outskirts where they live more rough and ready, and I have to be a great deal more careful with these people who live more centrally, and make the doses smaller and more frequent to get the desired effect. But the point that I wish to make is, that we can and do have to study the palatability of our remedies. I have had more than one physician prescribe in my family, and I always got along best with the one who didn't fire off shot-gun prescriptions. We very often fire shot-gun prescriptions, putting in cathartics and nervines into the same prescriptions; I would rather it would be one thing at a time and for a definite purpose.

Dr. D. A. K. Steele. There are a good many valuable points in this paper, and I think the criticism has pretty effectually squelched the objectionable ones. The author claims very valuable points from homeopathy; first, the palatability of their remedies; next, their safeness, that there is no danger in their remedies. That element of safety in prescribing we have applied in our own treat-

ment, some of us, not from belief in homeopathy, but from unerring experience. After having almost killed a few patients in my early months of practice, with large doses and polyglot prescriptions, I came down to smaller doses and found them much safer. Now in reference to some of the objections that may be urged against palatable remedies; the objection to pills is their insolubility, the fact that they pass through the alimentary canals unchanged. I have repeatedly found them undissolved; found that in administering quinine in that form I did not get the desired result. I think the author made a mistake in giving too little credit to our pharmacists for the advances made in pharmacy in late years. The essential point of the paper, to my mind, is the fact that it impresses upon us the importance of giving less medicine and of giving it in a more palatable form.

Dr. C. D. Webster. There is a point we can learn from homeopathy, one lesson which, it seems, has not been touched upon, and that is that in the vast majority of ordinary acute diseases, careful nursing and absolutely inert remedies bring very creditable, if not the best, results; inert remedies which simply occupy the attention of the patient, will produce favorable results. This is the important and only lesson that can be learned from homeopathy.

Dr. R. Tilley. Dr. Foster seemed to imply that we get our tendency to give small doses from the homeopaths. I take the opportunity of saying that in the large hospitals in Paris and London, they have placed patients with acute affections side by side, and to the one they have given all the medicine they have thought necessary, and to the other they have given careful attention and nursing, with the suggestions a practical physician would give, and there has been practically no difference in the result in the two classes of cases. Experience has taught us to give in certain cases, or in many cases, simply a teaspoonful of water occasionally, and that is very important especially in children; a teaspoon of water is frequently all that the child needs, although few people seem to realize the fact.

Dr. Doering. I object to crediting homeopathy with what science and chemistry has accomplished. Take the alkaloids, they have all been discovered in Germany, where homeopathy cannot live at all,—where they have not a single chair in any university. I think the paper would be much more valuable if all the reference to homeopathy had been omitted. Palatable medicines are simply the natural result of the advance of the science of medicine, chemistry and pharmacy.

Dr. C. T. Parkes. I recall one instance which illustrates the fact that palatable medicines are not always innocent and harmless. I was called to make a post-mortem examination of a boy six years old. Upon opening the abdomen I found in the abdominal cavity a round mass, and upon examination of this round mass it was found to be a sugar-coated quinine pill. These were also found in the vermiform appendix and had ulcerated through into the abdominal cavity. So far as my opinion as to homeopathy is concerned, I wish to go on record as agreeing entirely with Dr. Doering.

Dr. Martin closed the discussion by saying: In regard to the iodide of potassium, Dr. Tilley mentioned that he always gives iodide of potassium diluted in large quantities of water. When I was considering iodide of potash, I recalled the experience that I had myself in administering it, so I diluted the drug after getting it into the stomach; that is, I gave the patient water after he swallowed the capsule, and he experienced no trouble. In regard to permanganate of potash, it is not necessary to give it in capsules,—the oleate of manganese can be used by inunction, or the permanganate of potash be given in distilled water. In regard to the solubility of these pills, any of the best pills will dissolve in water in such a way that the remedies will become free in three minutes. If a capsule or pill of morphia be put in cold water, you can taste the morphia after it has been in the water not longer than two minutes, and you can readily see that by putting the pill into the stomach the gastric fluid, the temperature, and the muscular action, would soon cause its solution. In regard to the suggestion made by Dr. Webster, that the only lesson to be learned from homeopathy was the fact that a large per cent. would recover without remedies, I think I included that in my citing homeopathy as a lesson in general, for we all know from the success of homeopathy, if all their patients had died, or the majority of them had died, homeopathy would have gone out of existence immediately. But it was not the case, and it was taken for granted in the paper that the palatability and harmlessness of their remedies was the first great lesson of the evening and the paper. In regard to quinine pills, some time ago I believe that medicine was put up with sulphuric acid, and it lost strength and became almost inert, but now they put quinine up in excipients that dissolve readily, and, also, loosely in flexible capsules. The Society then adjourned.

THE AMERICAN ACADEMY OF MEDICINE.

REPORTED FOR THE REVIEW BY WM. H. MORRISON, M. D., PHILADELPHIA, PA.

[CONCLUDED.]

MEDICAL EVIDENCE.

By THOMAS J. TURNER, M. D., Medical Director U. S. N.

The raison d'etre of the paper had its origin in the writer's duty in connection with the naval retiring board. The positions of the medical member of the board are that of an ordinary witness, that of an expert witness, that of a concurrent judge of both the facts and the law, but with the execution of the verdict the board has no authority whatever.

In the first instance the medical officer makes a physical diagnosis; in the second place he makes a rational diagnosis based upon subjective phenomena. Combining these he arrives at a conclusion.

On questions of science, skill, art and the like, persons instructed on such subject matters, known in ordinary language as experts, are permitted from the necessities of the case, to give "matters of opinion" in evidence; and as to the necessity which permits the introduction of such opinions, each tribunal determines for itself at the time. Herein the expert differs from the ordinary witness who testifies as to "matters of fact." The boundary line where ordinary testimony ends and expert testimony begins, is not always well defined.

As far as relates to opinions on medical questions, any one at present may be permitted to testify, the question of the special amount of knowledge being left to the jurors to determine. It follows from this that there is no evidence which varies so immensely as so-called expert evidence. It has been decided that a medical opinion may be received as evidence if it is based upon study without practice, or upon practice without study, and it has been ruled that it is not absolutely necessary that one should have studied or practiced medicine.

The opinions of medical men are admitted in courts, upon the condition of the human race; thus, is or was a certain person sick; upon the nature and cause of the disease; the cause of death; the cause and effect of an injury; the effect of medicine or of a particular treatment; the liklihood of recovery; the mental condition of the person, and upon the examination of the party whose condition is under inquiry.

It was the speaker's opinion that the term expert testimony was somewhat misleading, and he preferred the term "opinion evidence" as used by Best as preferable, for opinions may be admitted in evidence by those who could not be classed as experts. The test of the admissibility of opinion seemed to the writer to be this. Has the expert witness any peculiar knowledge or experience not common to the world, which renders his opinion founded upon such knowledge or experience upon the subject matter under inquiry, of value to the court in determining the truth of the matter at issue? The degree of credence given to opinion evidence should be founded upon the professional skill, the quickness of perception, the powers of discernment, the aptitude, the acquirements and the education, as well as the experience and observation of the expert in the matters upon which his special expert knowledge arises.

REPORT ON LAWS REGULATING THE PRACTICE OF MEDICINE IN THE UNITED STATES AND CANADA.

By Richard J. Dunglison, M. D., of Philadelphia, and Henry C. Marcy, M. D., of Boston. Was read by Dr. R. J. Dunglison.

The doctor said that so little change had taken place within the last twelve months with reference to legislative restriction of the practice of medicine, that your committee in a few brief sentences dismiss the subject with the statement of the actual work accomplished in this direction. The honest efforts of medical men and of others during the past year to accomplish creditable results in the states for the repression of quackery have been unabating, but in several cases disappointment has been the only issue of their labor. Indiana and North Carolina are the only states in which any alteration in existing laws have been made.

Your committee entered into correspondence with medical gentlemen in the different states with regard to the working of laws for the regulation of the practice of medicine, and their replies are submitted.

The following is a synopsis.

From New York it was reported that the act of 1884 had not been effective in excluding from the profession grossly incompetent and uneducated men.

In Pennsylvania the registration act is executed about as well as any law of the kind could be without an executive head. It has

stopped the non-graduated class from practicing.

From Michigan, it is reported that the present law is defective.

In Tennessee, there is no law regulating the practice of medicine.

In Ohio, the only law is one passed fifteen years ago, requiring a diploma or a certificate from a chartered medical school. Several bills for regulating the practice of medicine have been proposed, but none have been adopted.

Wisconsin has adopted no law for the regulation of the practice of medicine.

Kentucky requires a diploma or a certificate from a State Examiuing Board. This law is working well.

Dakota, last winter passed an act establishing a Territorial Board of Health, the function of which is to grant licenses to practice medicine and surgery in the territory. There are, however, several difficulties in the satisfactory enforcement of this law.

Texas is practically without any law upon this subject.

In North Carolina, an act has recently been passed making it a misdemeanor, punishable by fine or imprisonment or both to practice medicine in N. C. without license from a board of examiners elected by the State Medical Society. The results of this law have so far been satisfactory.

In New Jersey, the registration law has proven of little service.

Nebraska has a registration. While its results are not evident, yet it seems to - paring the way for more effective action.

Iowa has no law regarding the practice of medicine.

Two years ago, Virginia passed a law establishing a state board of examiners. This is working satisfactorily.

Maine has no law on this subject.

In New Hampshire, the law regulating the practice of medicine has not accomplished very marked results.

In Maryland, the law works very badly.

In closing, Dr. Dunglison said, "From this sketch of medical legislation, the inference is fairly deducible that the legislation upon the subject of medical practice is not yet placed upon a sufficiently firm foundation to gratify the advocates of restrictive enactments, and that the obstacles to such healthful results are still operative but not insurmountable.

Dr. Benjamin Lee, of Philadelphia, read a paper on

HEALTH OFFICERS, ANCIENT AND MODERN.

The important position assigned to hygiene and state medicine during the past decade is an evidence at once of the advanced stage of civilization aud of the dense and rapidly increasing population. It also indicates that long occupancy of the land by successive generations, has at length overtaxed the regenerating and self-purifying energies of the earth, and that extraordinary methods have now become necessary.

Reference was then made to the honors bestowed on the officers of public health in ancient Rome, and the high esteem in which they were held. To this was largely attributed the excellent sanitary condition of that city.

The second portion of the paper was occupied with a consideration of the organization of boards of health. The first point made was that in selecting the material for boards of health, politics in the bad American sense of the term, should be rigidly excluded. Where it is possible to avoid it the members should not be elected by the people, especially is this the case in large cities.

Secondly. Boards of health should be composed chiefly of physicians, but at least one member should be a man eminent among his fellows, for prudence and judgment in trade and commerce, for doctors are, proverbially, bad business men.

Thirdly. As it is desirable that there should be harmony of action and of sentiment between the municipal government and the board of health, there should be a representative of one or the other.

Fourthly. It is essential for the practical working of the board that it should employ a paid agent who shall devote his time as much as it is necessary to inspection and investigation of the sanitary conditions of the locality, and carry into execution the orders of the board.

Finally, every member of the board should receive a fair and even generous compensation for his labors.

Adjournment of morning session.

The afternoon session was called to order at two o'clock.

Dr. Samuel N. Nelson, read a paper entitled

MICRO-ORGANISMS AND THEIR RELATION TO DISEASE.

DR. NELSON began by saying that the importance of the subject already much discussed, was the only apology offered for presenting it. That these minute organisms make up what they lack in size, by the interest they are causing in the scientific world. That great numbers of observers are at work on both continents in the solution of the

germ theory of disease. Their history is related to that of spontaneous generation, to that of the fermentations, to the pathogeny and therapeutics of a great number of virulent and contagious affections and in a more general manner to all the unknown, which notwithstanding the efforts of modern science still surrounds the origin of life and its preservation.

The bacteria belong to the vegetable kingdom and are the lowest of organisms, being merely cells of a globular oblong or cylindrical form, reproducing themselves partly by spores and by transverse division. The best authorities now adopt the simple classification into (a) bacilli or rod forms and (b) micrococci or the round forms. The first observer who recognized them was Leeunhoeck as early as 1675. Their study has advanced with the improvement of the microscope, until now many forms are only seen by the best of lenses aided by special condensers. The more delicate and exact methods of the most recent observers with regard to their nature, show that there are many varieties of them, each of which has its own conditions of growth and varies in its susceptibility to different temperatures and chemical reagents. Apparent identity of form does not necessarily indicate identity of nature. They may be cultivated in both solid and liquid nutrient media.

The theory of a casual relation between bacteria and diseased processes has recently received a wide acceptation. In some diseases this relation is demonstrated, while in others, it is presumed on the ground that bacteria are found in the blood and diseased products. It is not only necessary that the germs should be isolated and grown in pure cultures, but by inoculation the disease should be produced in healthy men or animals with a reproduction of the bacteria. Reference was then made to the various diseases that have been studied from this standpoint and the present status of our knowledge was remarked concerning tuberculosis, cholera, variola, scarlatina, measles, diphtheria, erysipelas, etc. Dr. Nelson related some of his own experience in cultures of the micro-organisms of many of these diseases with which he has made many thousands of experiments the last five years, both at home and in Germany under the supervision of Professor Koch in his laboratory in Berlin.

The next paper was on

Observations on the Relation of Bacteria to Certain Puerperal Inflammations,

By Dr. Ernest W. Cushing, of Boston.

These observations were based on the results of examinations of the bodies of such women as died from these maladies in the general hospital at Vienna last spring. He called attention to the great difference between the custom and rules governing the obstetric assistants and students in Berlin and in Vienna. In the former city every precaution is taken to avoid not only direct infection, but also any possible carrying of germs in the hair or clothing, as if bacteria were freely present in the air. In Vienna, although the possibility of so finding them is admitted in theory, yet in practice the assistants and students are allowed to be present at autopsies. Obstetric operations and laparotomies are performed before the whole class, without spray, and the chief assistants give operative courses on the cadaver every afternoon, relying for safety on washing, bathing and change of clothing. Practically, sepsis arising in the hospital is very rare and the results obtained by avoiding direct infection through the fingers and instruments, were regarded by the speaker as an argument in favor of the view that puerperal fever is not an entity, the poison of which is carried about in the air and enters the system through the lungs, etc., but that such fevers are the result of the invasion and multiplication of bacteria arising from infection of the uterus or abraded vagina, as a rule, directly from hands, instruments or applications.

Discussing the results obtained by the examinations above mentioned, the reader states that the most frequent cause of infection was the streptococcus; the next the staphylo-coccus with which is frequently associated the baccillus pyogenes fetidus. The first occurs in chains not distinguishable from those of erysipelas, the cocci usually lying in pairs, each pair representing a link. The staphylococci occur in bunches like those of grapes. One or the other of the above were found in all acute cases examined and were present in the uterine or iliac veins. In pelvic abscesses, they were found in the lungs and joints and in fact, wherever metastatic abscesses occurred. Microscopic preparations of the above and three specimen cases were described. Finally puerperal inflammations were compared to infected wounds. The powers of the system to resist, fence out, and kill the invading bacteria when the latter are not continually re-inforced were emphasized, and an active hopefulness was advised in regard to treatment, which, to be successful, should be analogous to that of surgical wounds, i. e., prompt removal of decompos-

ing matter, evacuation of pus, cleansing and disinfective douches and drainage.

In discussing this paper, Dr. R. Stansbury Sutton said that while there was no question as to the success achieved by the use of antiseptics in general surgery, yet in abdominal surgery, the best results so far had been obtained by strict attention to cleanliness without the use of any antiseptic agencies. He agreed with Dr. Cushing that when the poison enters the abdominal cavity in laparotomy, or into the vagina or uterus in puerperal cases, the germs are not carried by the atmosphere but by the hands, the forceps, ligature or instruments. As far as abdominal surgery was concerned, he thought that all chemical agents could be discarded, but cleanliness could not be lost sight of. He then referred to the injurious effects which had at times resulted from the absorption of such agents through the peritoneum.

Dr. Henry O. Marcy related a case bearing on the introduction of antiseptics into the peritoneal cavity. It was that of a child four years of age whose abdomen was filled with pus, in which the streptococcus was found. The pus was evacuated and the peritoneal cavity thoroughly washed out with bichloride of mercury solution. The patient recovered without a bad symptom.

Medical Licenses and Medical Honors was the title of a paper read by Dr. Edward Jackson, of Philadelphia.

A comparison was made between the requirements of the medical colleges of this country when first organized and the requirements of to-day, and gradual lowering of the standard with the corresponding decrease in the honor conferred was noted. While the population had increased twenty times, the number of graduates had increased five hundred times. Part of this increase is due to the fact that men who formerly practiced without a degree, now attend colleges and receive the degree.

In 1881 the medical diploma was put to a new use and became a license to practice. The inefficiency of the registration law, as well as the lessened honor which attaches to the medical degree was shown by the fact that in fifteen hundred registrations, only forty-eight were destitute of the doctor's degree, and these belonged to the poorest order of irregular practitioners.

The speaker thought it doubtful if any system of state license to pursue any calling should be looked on with favor. If adopted, it must be removed from all possibility of lowering competition, and surrounded by every guarantee of honest enforcement which disinterested examiners and full publicity can give.

A paper entitled

The Physician and his Patient,

by Dr. J. D. Kelly, Utica, and one by Dr. Lewis P. Bush, of Wilmington, Delaware, on

The Physicians of Deleware in the Eighteenth Century,

were read by title.

The president-elect was then introduced and made a brief address.

The Academy then adjourned.

ITEMS.

—The New York Polyclinic.—The necessity for post-graduate instruction seems increasingly felt, as this institution opens this year with a larger class of practitioners on its roll of students than ever before, and since its opening three years ago, over 600 physicians have registered in the various classes.

—The Annual Conference of the American Public Health Association will be held in Washington, D. C., beginning December 8, 1885. The Baltimore and Ohio Railroad will return at one-third the limited fare to Louisville, St. Louis and stations on this line, those who pay full fare over this road and the B. & O. R. R. to the Conference.

Certificates will be furnished the members by the Secretary of the Association before they leave home, in order that they may obtain from the ticket agent at starting point on this road, an endorsement on the back of the certificate stating that the holder has purchased a ticket to Washington at the regular fare.

In this connection attention is called to the unequaled facilities offered by this line as a route to the National Capitol.

Two daily express trains from Louisville and St. Louis carry passengers to Washington in from three to four hours quicker time than is made by any other line.

An additional advantage of this route is found in the fact that it is the only line running Sleeping Cars through from St. Louis to Washington and Baltimore.

Further information in regard to rates of fare, time of train, etc., can be had of the following:

G. D. Bacon, General Western Passenger Agent, St. Louis. Mo.

J. D. Phillips, Ticket Agent, 101 and 103 N. Fourth St., St. Louis, Mo.

R. S. Brown, Southern Passenger Agent, S. E. Cor. Fourth and Main Streets, Louisville, Ky.

W. B. Shattuc,
General Passenger Agent.

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TENDON-REFLEX.

Dr. Gowers presented a paper on the clinical significance of the "Deep Reflexes," at the London Medical Society recently, and a lengthy discussion ensued thereon. The editor of the British Medical Journal reviews the proceedings and writes as follows in the Journal:

"It is just ten years since Erb and Westphal simultaneously published their discovery —not of the existence, which was a popularly known fact, but of the clinical import—of the muscular contraction which follows a blow on the patellar tendon, now called the knee-jerk. It is a curious fact to observe that, whilst the divergence of opinion between these two great clinical observers as to the physiological explanation of the phenomenon still subsists, notwithstanding the elaborate and persevering endeavors of experimenters, their view as to the diagnostic importance of the sign has received the unanimous support of all subsequent observers.

Dr. Gowers opened the discussion with a statement of his own views concerning the theory of what are generally known as the "tendon-reflexes." In order to place the reader in a better position to judge of the whole question, let us ask ourselves what are the events occurring between a tap on the patellar or other tendon, and the muscular contraction which follows it. A sensory impression is produced on the skin and deep parts, the tendon and muscle are suddenly stretched, and ingoing currents are sent from these peripheric organs to spinal and other central masses of nerve-matter. Now, the whole question is, to which of these elements the contraction is due. Is it a skin-reflex? a tendon-reflex? a muscle-reflex? or, is it a direct result of the sudden stretching of the muscular fibres, as the wave so frequently seen running along the pectorals during percussion is due to the mechanical excitation of the impact?

Erb believed that an excitation of the sensory nerves of the tendon is conveyed to the spinal cord, and therein converted into a motor impulse; hence the unfortuuate, though short and handy, name of "tendon-reflex," given by him to the contraction of the quadriceps extensor. Westphal, more philosophical perhaps, though holding the view of a direct excitation of the muscular fibre, did not crystallize his opinion into a special term, and was content to designate the fact as the "knee-phenomenon."

The possibility of the jerk being the last factor of a reflectory process, starting in a cutaneous excitation, was readily placed out of question by the simplest experiments. In animals, the substitution of a string for the tendon, and percussion on that string, showed also that the contraction following the tap is not the manifestation of a "tendon-reflex" process. Two alternatives were left, therefore, and between these physiological opinion is not yet settled.

Among those who, abroad, have contributed facts and arguments towards the solution of the problem, are Burckhardt, Tschiriew, Eulenburg, Brissaud, Prevost, Ter Meulen, and Jendrassik. It would lead us too far to speak in detail of their methods and results. The general tendency on the Continent is to adopt the view that the contraction which is provoked by a blow on the tendon, or a sudden extensile impulse given to it, is a "muscle-reflex;" in other words, depends upon an excitation of the centripetal muscular nerves, and a consequent reflected discharge of certain spinal motor cells. Apart from the ques-

tionable element of the "short latency," we find an obvious difficulty in accepting this reflex theory in the fact that the spinal motor arrangements would lead us to expect a coordinated movement, rather than a discharge strictly limited to a single muscle.

The main argument of those who maintain that the knee-jerk and its congeners are a manifestation of the muscular irritability properly so-called, has hitherto been that the time which elapses between the percussion and the contraction is not sufficient to allow us to assume a complete reflex cycle of events. In England, this view is perhaps held by the majority of neurologists. Dr. Gowers was the first in this country to perform experiments tending to establish the exact interval between the tap and the contraction. His results were embodied in an elaborate paper presented to the Royal Medical and Chirurgical Society in 1879. Unfortunately, owing to certain fallacies which had not been eliminated from his investigations, the results he reached were ambiguous. For, whilst he obtained evidence of a very short time "latency" in the case of the tendo Achillis, his tracings showed a very protracted period as elapsing between a blow on the patellar tendon and the movement of the leg produced by the contraction of the quadriceps extensor. Hence, he concluded in favor of a process of reflected excitation in the latter case, of direct excitation in the former. In the second edition of his Diseases of the Spinal Cord, however, which appeared shortly after a paper in which Dr. Waller clearly established that the latencies of the two phenomena are identical, Dr. Gowers recognizes his error, and shows himself a warm supporter of the "direct muscular theory." Further evidence in the same direction was afforded by the results of Dr. de Watteville, who also showed the possibility, in certain pathological cases, mistaking a true spinal reflex for the normal "tendon pseudo-reflex."

One difficulty had to be met by those who considered the knee-jerk as due to a direct muscular excitation. They had to reconcile their view with the undisputable fact that this excitation remains ineffectual when the posterior lumbar nerve-roots are divided or diseased. Waller appears to have been the first to give a definite explanation of the fact. Physiological tonus, he said, is a reflex process of muscular innervation. Unless tonus be present, a tap of the tendon will fail to excite the fibres by suddenly stretching them. Hence any break in the musculo-spinal reflex loop will abolish tonus and knee-jerk together.

Dr. Gowers's theory, which he once more brings forward with greater fullness in his recent address, is somewhat more elaborate. Instead of appealing simply to physiological tonus, he asserts that the moderate degree of tension which is necessary in order to obtain what he calls the "myotatic contraction"—in other words, the "tendon-reflex"—is in itself the source of a reflex tonic excitation of the muscular fibre, which then only becomes fit to respond to extensile impulses.

It will thus be observed that, from a practical point of view, the symptomatic value of the presence or absence of the knee-jerk remains the same, whatever theory we adopt as to the mechanism on which it depends. By striking a tendon, what we wish to ascertain is whether the musculo-spinal reflex loop is or is not active and pervious in all its elements. Whether we test this loop by a direct appeal to its functions, or whether we investigate a muscular condition which we know varies with the normal discharge of these functions, we are equally entitled to draw our conclusions from the results.

Dr. Gowers's interesting speculations concerning the spinal mechanisms presiding over the reflected muscular tonus will no doubt prove suggestive to the physiologist and clinical observer alike. But we hasten to reach the second part of his address, where he treats of the symptomatic import of the abnormalities, excess or deficiency, often found in the tendon-reactions of patients suffering from many forms of nervous disease. As he rightly remarked, the first question relates to the uniform existence of the knee-jerk, which is the typical instance of these reactions in

all healthy individuals. Former observers had concluded that it is absent in a certain percentage of cases. Now it is obvious that if loss of knee-jerk is, as we generally believe, an early sign of neurotic trouble, it is a contradiction in terms to speak of those in whom it fails to be elicited as of healthy subjects. But this is not all. In an instructive paper read before the Neurological Society of Berlin, two years ago, Dr. Pelizaeus says that in the first examination of 2,403 boys he found the knee-jerk absent in six. One of these he discovered had had diphtheria some weeks previously, whilst another was unmanageable. He submitted these six boys to repeated investigations at various intervals, and eventually elicited the contraction in all except one, whose nutrition was very defective; but in whom no certain evidence of a neurotic diathesis could be obtained.

There were but trifling divergencies of opinion expressed in the discussion which followed the reading of Dr. Gowers's paper on the subject of the tendon-reaction in organic diseases of the cord and brain. Not so, however, with reference to true ankle-clonus, the possible presence of which in pure hysterical paraplegia is affirmed by Dr. Buzzard and others.

This question is a delicate one, and will no doubt be settled by a more stringent definition of terms, and by more extended series of clinical observations. In the meanwhile, we are in possession of facts which raise doubts as to the intimate connection of ankle-clonus with organic cerebro-spinal disease, and point to a greater independence between it and an exaggerated knee-jerk, than has hitherto been assumed to exist. Thus, Dr. de Fleury, under Professor Pitrès' guidance, has published some cases in which simple rheumatism, fracture of the tibia, disease or injury of the tarsus, were accompanied with a lively ankle-clonus, without any correrponding increase of the knee-jerk. Again, in three cases of typhus, foot-trepidation coexisted with absence of patellar response. Experiments with Esmarch's bandage gave results in the same sense. These and many other facts will have to be considered and submitted to controlling investigations, before we can come to definite conclusions as to the physiological nature and clinical import of these complex neuro-muscular manifestations.

In the meanwhile, Dr. Gowers has done good service in bringing forward, in plain and forcible language, his facts and opinions on these interesting and important topics."

Resection of the Jaw for Anchylosis.—The Medical News writes: "It is a very remarkable thing to find an operation, which would seem to be so natural as this, among the most recent and rarest in the history of surgery. And yet, so far as available statistics indicate, resection of the lower jaw, at the joint, for anchylosis, has been done only about in thirteen cases, and of these only three have been in this country. The first operation was performed in 1874, by Dr. S. D. Gross; and the other two were done in 1875 and 1884, by Dr. J. Ewing Mears. The first of Dr. Mears' operations is reported in the Transactions of the American Surgical Association vol. i., and from a short historical sketch of the subject, which is appended, it may be seen that a number of surgeons have come quite near the idea of this operation. One of the earliest was Dr. Carnochan, of New York, who, in 1840, suggested the removal of a segment of the lower jaw in order to restore its mobility; while independently, although fifteen years later, Esmarch proposed a similar operation, which is known by his name; and in 1857, Rizzoli divided the jaw in front of a cicatricial contraction, and inserted gutta-percha plates to prevent subsequent union of the divided surfaces. None of these operations, however, is to be classed with resection of the jaw at the joint, a procedure which should properly be credited to Bottini, who, in 1872, communicated to the Royal Academy of Medicine of Turin a case in which he did a subperiosteal resection of both condyles for permanent closure of the jaw. He was the first to operate directly

upon the joint, and the result was most excellent.

In 1874, the elder Gross, in a case of complete synostosis of the lower jaw of the left side, in a girl seven years of age, excised the condyle along with a portion of the neck of the bone, through a curvilinear incision in front of the ear, and established excellent motion. Koenig, in 1876, did a resection of the left temporo-maxillary articulation for anchylosis, and he operated in the same way again in 1877. Both cases were entirely successful. His method of operating is as follows: An incision, about an inch long, is made over the lower border of the zygomatic process, and another, about two-thirds of an inch long, is made perpendicular to, and descending from the former. The latter incision is carried only through the skin, so as to avoid the facial nerve. Through the opening, after cutting some of the fibres of insertion of the masseter muscle, the articular process of the maxilla is cleared with a raspatory, after which it is carefully separated from the ramus with a chisel, and removed from the cotyloid cavity. Koenig reported these cases in the Deutshe Zeitschrift f. Chirurgie in 1878, and recommended removing the coronoid process also when this might be necessary. At about the same time, and apparently independently of any suggestions, von Schultén operated upon both sides of the jaw, commencing with the removal of the coronoid processes. Koenig's method has been followed, with slight modifications, once by Ranke in 1878 and twice in 1885; once by Hagedorn, in 1880; and once by Langenbeck, in the same year; while Kulenkampf reports an operation in the Centralblatt f. Chirurgie of this year as done by the method of Mears.

When to this list is added another operation by Koenig, in which the patient died of chloroform narcosis, we have a concise history of the operation of resection of the lower jaw, at the joint, for immobility. In analyzing the cases reported, and more particularly the interesting paper upon this subject by Mears, already referred to, and a recent one by Ranke, in the Archiv f. Chirurgie, Bd. xxxii. Heft 3. 1885, we observe that the operation is not so clearly defined as to its indications, or its mode of performance as one might at first sight suppose. As now understood, it may be described as an exsection of the articular process of the inferior maxilla for anchylosis, with subsequent freeing of any adhesions, cicatricial, muscular, ligamentous, or bony, which stand in the way of its success. But it is clear that the operation of excision of this part of the bone is wholly out of place as a means for the restoration of motion which is impeded solely by contraction of the soft tissues. For this, other measures may be successfully employed. The operation cannot, moreover, be considered as strictly applicable to the cure of irreducible luxations, although it has been twice done successfully for this object. For its legitimate purpose, however, there can be no question that it is deserving of a high place in the list of approved surgical measures. In the perfection and permanency of its results it leaves little to be desired. The old ways of wedging and prying open the jaw were harsh and comparatively fruitless. This is painless to the patient, and almost absolutely safe, if properly carried out.

But what is the best method of doing the operation? To this question we think it is safe to answer as Ranke does, namely: to make the first incision of Koenig over the lower border of the zygomatic process, and to omit his second perpendicular to it. When it comes to the separation and removal of the piece of bone, we would strongly urge the advantages of drilling it out with the rapidly revolving burr of the so-called "dental engine" invented by Dr. Bonwill, of this city. When this macnine is used by one who understands its management, its work is vastly superior to anything which can be done by the chisel and mallet, even in the most accomplished hands. As it is, unfortunately, not always available, the next best method is to use the chisel as carefully as possible. In some of the operations reported, the bone forceps, or the saw, has been used. But these have all been cases in which there was much more than a simple

exsection of the articular process. That of Dr. Mears was a removal of quite half of the ramus. Peculiar circumstances, such as there existed, may demand the resection of so much bone, but in its simplest form the operation should not contemplate this.

Before closing, it may be well to refer to a roposition made by Bassini, of Milan, in 1879, to correct anchylosis of the jaw, by removing, with a small trephine, a portion of the neck of the bone. This method has much to commend it where it is feasible, but it differs only in degree from the earlier operations in which the bone was divided at different points below the seat of the adhesions. Ranke thinks it is open to the objection applicable to all of them, namely, the liability to speedy reunion. That may be, or not, as experience may decide. At any rate, the operation of excision at the joint, with which the names of Bottini, Gross, Koenig, and Mears are justly to be associated, is one which may be commended to further trial on the part of surgeons who have to deal with otherwise incorrigible anchylosis of the jaw."

Infantile Cerebral Pneumonia.—In referring to some remarks of Dr. Keating wherein he said the cerebral symptoms were sometimes so prominent in children as to distract our attention from the lungs, the Med ical and Surgical Reporter adds: "We now note that the Lancet says: "The determination of the locality of an acute inflammation is frequently a matter of great difficulty in infants. Much disease may exist in almost any situation without giving rise to any obvious clinical signs. On the other hand, it sometimes happens that very little disease produces marked symptoms, even the gravest of all symptoms—death. M. Huchard has put on record (Revue Mensuelle des Maladies de l'Enfance, 1885), the case of a child, aged sixteen months, in whom violent convulsions, cervical opisthotonos and coma were present without any meningeal affection, but with croupous consolidation of the upper lobe of the right lung. The greater tendency for marked cerebral symptoms to appear in cases of pneumonia of the upper lobe has been insisted upon by Heinze and others."

Lymphoderma Perniciosa.—The Lancet (Practitioner) writes: Under this title Prosessor Kaposi of Vienna has lately described in detail a case of what he believes to be a hitherto undescribed form of skin disease. A widow, aged thirty-nine had suffered for more than a year from an eruption, which passed at first for a universal chronic eczema. On admission to hospital the face and hands were chiefly affected, but the skin of the scalp, forehead, face, ears, and neck was of a diffuse brownish-red color, thickened, desquamating and with honey-like crusts here and there. In the clavicular regions, upper part of chest, and axillæ, the submammary folds were reddened more or less, and desquamating or oozing. On the abdomen and back were similar patches. The extensor aspect of the upper limbs was the seat of a certain degree of desquamation, and the skin of the wrists and hands was thickened, scaly, cracked, and oozing in places, whilst the inferior extremities were less affected. The inguinal and cervical glands were swollen to the size of nuts, and firm. No visceral disease was detected, and the temperature was normal, but violent itching accompanied the eruption. On the left thenar eminence and the flexor aspect of the fore-arm were to be felt in the subcutaneous tissue several firm nodules, in size from a pea to a pigeon's egg, fairly well circumscribed. From her admission till six months later, when the woman suddenly died after an acute paralysis of the left inferior extremity the day before, the nodosities steadily increased in number in the deep cutaneous and the subcutaneous tissue of the flexor aspect of the fore-arms, breasts, epigastrium, abdomen, face, etc. They softened and ulcerated through and became covered with crusts. The face became enormously swollen and leontiasic, and the ears stood out from the head. The spleen soon became enlarged, and a serous infiltration of the skin set in with ascites. The lymphatic

glands became involved, and a progressive diminution of red blood-corpuscles was traced. At the necropsy the spleen was four times its normal size, the liver voluminous; some small nodosities were found in the lungs and beneath the pleura, and the medulla of the bones seems to have been affected. The skin and lung tumors were all of the same character, and the former apparently originated near fat lobules. They were composed of a delicate fibrillar stroma, deprived of vessels, with connnective-tissue corpuscles poor in protoplasm in places where cells, resembling lymph cells, and lymphoid nuclei occurred aggregated in extremely dense masses free in the intercellular spaces. Professor Kaposi refers shortly to cases described as lymphadénie cutanée by French authors, which have been described, if we remember rightly, as preceded by eczema, but he refuses to acknowledge the identity of the affections.

The Prevention of Ophthalmia in New Born Children.—The Therapeutic Gazette reports: "At the annual meeting of the Obstetrical Society of London, held February 4, 1885, Dr. M'Keown read a paper on "The Prevention of Ophthalmia Neonatorum and its Ravages" (Lancet, February 21, 1885). The author pointed out that the text books and lectures on midwifery should deal fully with the etiology, progress, and treatment of ophthalmia neonatorum, and that midwives should be taught and required to understand their duties with regard to the disease. Infective matter in the genital passages of the mother is a frequent cause; it has been stated to be the only cause; and hence attempts have been made to prevent the disease by treatment applied to the vagina before delivery, and to the child's eyes immediately after birth. It was also claimed that by vaginal injections the frequency of the affection had been diminished, and by some that by treatment of the eyes, the disease had been prevented. Abolition of the disease was stated to have been obtained by Créde in 499 cases by washing the eyes with pure water and then applying a two per cent solution of nitrate of silver. At the Stuttgart Maternity, by Créde's plan a large reduction in the frequency had been effected; (a) by the nitrate of silver treatment in the wards of Professor Carl and Gustav Brown, where, of more than 3,000 births, only 1.93 per cent were affected, whilst of 1887 born at the same time, but not similarly treated, 4.34 per cent were affected; (b) by Prof. Olshausen, who, by washing the eyes with a one per cent carbolic solution, reduced the percentage from 12.5 to 6 per cent; (c) in the practice of Prof. Simpson, by the nitrate of silver treatment; (d) of 2266 births in the practice of Dr. Abegg, who washed the eyes immediately after birth with pure water, only 3 per cent were affected; (c) reduction in the frequency had also been obtained by Bischoff, who, by vaginal carbolic injections and washing of the eyes with salicylic lotion, reduced the percentage from 5.6 to 2.6 per cent and also by Créde, by vaginal injections (carbolic and salicylic acid). These results warranted an extensive series of investigations in order to determine to what extent the occurrence of ophthalmia neonatorum might be prevented, and what methods of treatment yield the best results. These points could be settled only by those in obstetric practice. Inquiries were needed regarding, first, the influence of cleansing and disinfecting of the general passage of the mother previous to delivery. Was this a plan of treatment which might be adopted as a routine practice, in every case of labor? Secondly, the influence of simple cleansing, and astringent treatment of the eyes immediately after birth. The entire treatment of the eyes should be in the hands of members of the profession, and investigations should be made in the various lying-in hospitals of the country by the resident medical officers of those institutions.

Toxic Effects After the Local Use of Cocaine.—The Medical News quotes the Lancet: "Experience in the use of cocaine as a local anesthetic is beginning to prove the necessity of some degree of caution as to the

quantity used, as several cases in which symptoms of cocaine poisoning have occurred have been up to the present time reported by various observers widely separated from one another. Knapp described headache, vertigo, nausea, tottering gait, pallor of the skin, and cold sweat as the result of daily hypodermic injections of thirty-five drops of a four per cent solution, with instillation of a few drops of the same solution in the conjunctival sac. G. Mayerhausen, of Freiburg, after applying fifteen drops in two drop doses, at intervals of from five to eight minutes, to the eye of a little girl of twelve in whom the lachrymal secretion was so copious that he felt sure that half the application was lost, or that the total quantity of cocaine which was capable of producing any effect was probably not more than 0.005 gram, found headache occur immediately after the operation, which was followed by irritation in throat and great nausea, with some temporary paralysis of the tongue, from which unpleasant effects she did not recover for twenty-four hours. Peck, on using cocaine on a lady on whom he performed tenotomy, observed a marked paleness come over her face.

Reich recently reported two cases in the Russkaya Meditsina in which similar toxic symptoms occurred, the one being a girl of ten years of age, the other a woman of sixty. In both cases a two per cent solution was employed, and the quantity used did not in either exceed fifteen drops. Stevens mentions a case in which faintness and cold perspiration were observed, but which he thinks were perhaps due to nervousness, as on a subsequent occasion this patient suffered no ill effects from cocaine. He had, however, another case where seven or eight minims of a four per cent solution produced spasm and loss of consciousness in a healthy male subject.

Quite recently an account has been published by Dr. Bellyarminoff, of St. Petersburg, of five cases in which the use of a four cent solution in various eye operations was followed by headache, vertigo, nausea, vomiting, delay in the healing of the corneal wound, and in some instances by traumatic keratitis. All the patients were elderly females, in a more or less emaciated condition. It was found that ice and morphia were ineffectual in arresting vomiting, and that the best treatment was wine. In some of the patients a subsequent operation was well borne by using a two per cent solution and limiting the number of drops instilled. Dr. Bellyarminoff remarks that when cocaine is badly borne the patient is generally a female, and aged, or badly nourished. He thinks it safer to use a two per cent than a four per cent solution. Finally, it must be added that cocaine has been charged by Keyser, of Philadelphia, with causing a tendency to panophthalmitis after cataract operations, he having found this serious complication occur in three cases out of seven in which he used the drug.

Recent Legal Decisions on Medical Matters. — We find the following in the Medical Record: "The Second Comptroller of the Treasury, Judge Maynard, has charge of pension matters and occupies a semi-judicial position in regard to the proper construction of the law. Section 4,718 of the United States Revised Statutes contains the following paragraph: 'If any pensioner has died or shall hereafter die; or if any person entitled to a pension, having an application therefor pending, has died, or shall hereafter die, his widow, or if there is no widow, the child or children of such person under the age of 16 years shall be entitled to receive the accrued pension to the date of the death of such person. Such accrued pension shall not be considered as a part of the assets of the estate of the deceased, nor liable to be applied to the payment of the debts of said estate in any case whatever, but shall inure to the sole and exclusive benefit of the widow or children; and if no widow or child survive, no payment whatsoever of the accrued pension shall be made or allowed, except so much as may be necessary to reimburse the person who bore the expenses of the last sickness and burial of the decedent in cases where he did not leave sufficient assets to meet such

expenses.' The latter part of this paragraph came before Judge Maynard to decide as to the meaning of the phrase 'last sickness,' under the following circumstances: An old soldier, named Mark Newman, died in August, 1884, while his application for a pension was pending, but undecided. It was granted in October, 1884, and it was decided that there was due him $2,439. He left no widow or children, and consequently, under the statute, there was nothing payable except what was sufficient to reimburse the person who bore the expense of his last sickness and death. The pensioner had lived at the house of John Parsons during part of the time between his discharge from the army in 1864 and his death in 1884, and the event took place at Mr. Parsons' house. The latter put in a claim to the Pension Office for $4,401 or expenses incurred during the last sickness and burial of Newman, upon the theory that the injuries received by him in the service of his country were so serious and permanent that the whole period of twenty years was to be regarded as his 'last illness.' The claim was once passed upon by the accounting officers of the Treasury, and allowed in January, 1885, to the full extent of the pension, viz., $2,439. The case then came before the Second Comptroller who decided that the phrase 'last sickness' had always been limited to that which was the immediate cause of death, and could never be applied to a long eriod of disability, as in this case, from which no fatal results were to be immediately apprehended. For this reason the claim made by Parsons was disallowed, and instead he was granted, for expenses of board, nursing, and care of Newman, $320; for bill of physician, $92, and for funeral expenses, $57, or $469 in all.

"A Connecticut graveyard was recently disturbed and three old graves opened to enable an English gentleman to see if any of them contained a signet ring, which was necessary to prove certain impressions on seals. It seemed that an important link was wanting in the settlement of an English estate, and the production of the ring would determine the succession to the property. A careful examination was made of the graves, but without finding the much-desired ring.

"One of the Boston telegrams recently contained an amusing story of the examination of a witness. It appeared that a liquor trial was going on in a police court at the same time that an examination was to be held at Police Headquarters for appointment on the police force. By some misunderstanding a witness in the liquor case was admitted to the room containing the applicants for police positions. The sergeant in charge supposing that he desired to be examined physically, ordered him to remove his clothes. He appeared to be greatly surprised, and asked if that was necessary. He received an affirmative answer, and as several others in the room were doing the same thing, he followed their example. In a few minutes the physician came to examine him, and made a very thorough business of it. The face of the witness was all the time a curious study. He was evidently trying to determine what connection there was between his bodily condition and his evidence in the liquor case. All doubts were dispelled, however, when the physician remarked, casually: 'So you want to be appointed on the police force, do you?" The man jumped as if he had been struck. 'Mein Gott, no, I do'nt!' he yelled. The spectators say that he beat the record in getting inside his clothes.

"A Michigan court has recently had before it a case involving a contract made by a drug establishment not to sell certain pills below a certain price. Such a contract the Judge held to be valid, on the ground that pills, unlike wheat and other articles of food, were not necessaries of life, and so not contrary to the rule which forbade, for reasons of public policy, contracts to raise the price of food artificially. The Judge enunciated the startling opinion that the assertion that pills were 'in any sense indispensable to the human race would be a violent presumption, not to be entertained judicially, and only to be established by evidence which every sensible man knows has no existence.' The learned Judge, in thus attempting to annihilate a

whole trade, forgets that pills are indispensable to the druggist and to the patent medicine msnufacturer, if to nobody else. This extensive class of people are most positively of the opinion that the safety of the world depends upon the unhampered manufacture and sale of pills."

THE NEW ANTISEPTICS, HYDRONAPHTHOL AND THE POTASSIO-MERCURIC IODIDE.—R. J. Levis, M. D., one of the attending surgeons to the Pennsylvania hospital, read before the Philadelphia Academy of Surgery, November 2, 1885, the following notes that we find in the Maryland Medical Journal:

"The following are the claims made for the newly-discovered antiseptic, hydronaphthol:

It is at least twelve times as effective as carbolic acid, and is entitled as a true antiseptic to occupy a position in the comparative tables next to the mercuric bichloride.

It is thirty times as potent as salicylic acid, sixty times as effectual as boric acid, and has six hundred times the antiseptic power of alcohol.

Hydronaphthol is soluble when placed in cold water to the extent of one part in two thousand. It is soluble in hot water in the proportion of one to one hundred; but when the water becomes cooled to ordinary temperatures a precipitate occurs, leaving a solution of one to one thousand. In this strength of one to one thousand it permanently prevents the development of the germs of putrefaction in all putrescible fluids.

Whilst the true antiseptic or inhibitory action of hydronaphthol in such cold aqueous saturated solution is perfect, its germicidal and proper disinfectant power is ineffective. For the destruction of already existing germs, such as have a tenacious vitality, as those of anthrax bacilli and pathogenic micrococci, it therefore cannot be relied on. As to its action in this regard, as compared with carbolic acid, it should be remembered that a ten per centum carbolic solution is required—a strength practically improper in wound-treatment. In ordinary antiseptic practice, carbolic acid is valuable only on account of its inhibitory action.

The first use of hydronaphthol as an antiseptic was by Dr. G. R. Fowler, of Brooklyn, to whom the profession is indebted for its introduction to practical surgery. My own experience with the antiseptic action of hydronaphthol in the wards of the Pennsylvania Hospital and in private surgical practice confirms his observations, as given in his recent articles in the New York Medical Journal.

Hydronaphthol is a grayish substance, in the form of crystalline lamina, having a slightly aromatic taste and odor. It is soluble freely in alcohol, ether, chloroform, glyceerin, benzole and the fixed oils.

In the aqueous saturated solution of one to a thousand it is absolutely unirritating, and has no toxic action, either local or systemic; is free from unpleasant odor, and has no injurious action on metallic instruments or on clothing fabrics.

Besides its use in aqueous solution, I have used it in the form of a powder diluted, preferably with the oxide of zinc in the proportion of one to fifty.

I believe that hydronaphthol may well displace carbolic acid from practical surgery.

The potassio-mercuric iodide is four or five times as powerful as a true germicide or disinfectant as the mercuric bichloride. For such use it is effective in aqueous solutions in the proportions of only one to twelve thousand.

The potassio-mercuric iodide is made by simply dissolving equal quantities of the biniodide of mercury and the iodide of potassium in distilled water. The solution is evaporated, and there remain yellow, needle-like crystals of the potassio-mercuric iodide.

In the use of such dilutions of this powerful antiseptic, local irritation is entirely avoided, and the risk of producing the constitutional effects of mercury is greatly diminished.

The introduction into surgical treatment of these two remarkable and powerful substances, hydronaphthol and the potassio-mercuric iodide, will do much to overcome some of the objections and inconveniences of antiseptic practice."

THE DIAGNOSIS OF FRACTURES NEAR A JOINT.—The American Medical Digest finds in the Medical and Surgical Reporter:

"This is oftentimes a very difficult matter, and has frequently caused the sweat of anxiety to bedew the forehead of the most experienced surgeon. Crepitus, deformity and mobility, these classical signs of fracture, Dr. Oscar J. Coskery tells us in the Med. Chronicle for July, are not infrequently wanting. But there are three other signs that stand us in good stead: fixed pain, the site and quantity of the hemorrhage, and the perfect helplessness of the limb. It often happens, as for instance in fractures of the fibula alone, that we can observe no deformity, crepitus or mobility, but if we follow the line of the fibula up, at one certain point the tip of the finger elicits pain. If this is always complained of whenever pressure is made upon this point, he thinks the diagnosis is plain. The pain is evidently due to the soft parts being irritated by the sharp edges of the fractured surfaces.

The second of these signs, the site and quantity of the hemorrhage, should be considered thus: The patients whose cases he details, fell, striking upon the outer side of the limbs, and ecchymoses slowly made their appearance on the inner side, and then in considerable quantity. Had the bleeding been the result of contusion alone, it not only would have appeared sooner, but at the point injured. As it was from the small and non-contractile vessels of the bone, the bleeding was longer in progress than it would have been in the soft parts, where, very probably, a larger vessel would have been ruptured. Again, during this slow bleeding the blood had time to gravitate to a dependent position, or direction of easiest escape.

The absolute helplessness of that portion of the limb that contains the broken bone is, probably, the most important of these signs. The fact that a patient has not made a step after the accident, or raised his hand above his head, is a strong point to start from in attempting the diagnosis.

There is one mistake that he has several times seen made in diagnosticating fractures of the femur. When the patient is told to raise his thigh from the bed he can do so by contracting the hamstring muscles, sliding the heel upon the bed, and thus the lower end of the femur is pushed up by the head of the tibia; but the psoas-magnus and the iliacus do not contract.

TREATMENT OF LACERATED MIDDLE MENINGEAL ARTERY.—Before the Clinical Society of London (Medical and Surgical Reporter) Mr. Charters Symonds read a case on trephining for compression by a clot derived from the middle meningeal artery, and suggested the resort to compression or closure of the carotid as a means of arresting the hemorrhage. A man, aged forty-three, fell from a height of six feet, striking his head. He was admitted immediately into Guy's Hospital, and was seen shortly after in a totally insensible condition, with right hemiplegia and a pulse of 52. He had two abrasions on the left temporal region, and a large extravasation of blood. Though there had been no conscious interval, Mr. Symonds immediately trephined on account of the hemiplegia and deepening coma. The site selected was rather posterior to that usually chosen, as here the chief injury seemed to have been received. On elevating the disc of bone a pulsating clot was exposed and removed. The bleeding was profuse, and to reach the laceration a great deal of bone was removed by Hoffman's forceps, two loose pieces of the sphenoid being found. Two lacerations were found in the vessel; one was closed by under-running the vessel with fine gut; the other by completing the division of the vessel and twisting both ends. The bleeding, however, still continuing, and the bone having been incised to the base, the hemorrhage was finally arrested by under-running the artery with a piece of the dura mater, and making traction on the ligature carried out of the wound, and by a pair of torsion forceps pushed down into the farthest accessible point and given a half twist. The operation altogether lasted two hours, and the man lost much blood. Recovery was im

mediate. As soon as the clot was removed, the pulse rose from 40 to 64, and the muscle of the right foot moved; and at the conclusion of the operation the man could move his right arm and leg, and give his name and address. The next day he answered all questions and spoke rationally. The same afternoon he became restless, and finally delirious, coma supervened, the temperature rose gradually, reaching 104.8° shortly before death, which took place at 3:15 p. m., or fifty hours after the acccident. At the autopsy the dura mater over the exposed area was yellow and purulent, and there was general congestion. The temporo-sphenoidal lobe on the right side was bruised, as was the cerebellum. The fracture extended from the site of the operation to the wing of the sphenoid, and there divided into two branches, the one runing over the orbital plate to reach the cribriform plate of the ethmoid, the other reaching the same point after traversing the optic foramen and sphenoidal fissure. In his remarks Mr. Symonds said that his main object was to call attention to the want of information upon the best method of dealing with the bleeding vessel, and to suggest a resort to compression of the carotid from the moment such a case is seen, and to its ligature, should, after trephining, other means fail to arrest the bleeding. Though no mention was made in our leading works of this method of arresting the hemorrhage, no doubt the idea had occurred to others before it had to him in connection with this case two years ago. To the severity of the operation, to its great prolongation, and to the loss of blood, he attributed the fatal meningitis, and did not think that the result affected the average success of trephining. As to whether it would be better to secure the external or common carotid, he thought that while deligation of the external would remove the special cerebral dangers attending closure of the common its safety was to be established. He considered that with our present method of treating wounds he would prefer to close the external carotid. Mr. Furneaux Jordan's suggestion to ligature the carotid instead of trephining, while it was thought effective, would, Mr. Symonds considered, be confined to those cases seen very early, and would therefore, have but a limited application. The absence of the interval of consciousness was considered to be dne to concussion, while the strictly localized character of the paralysis was unlike that seen in cases of cerebral laceration.

CONTRIBUTION.

DISLOCATION OF RADIUS AND ULNA INWARD AT ELBOW.

By Louis Hauck, M. D., St. Louis, Mo.

P. Burns, aged 13, was brought to our office at noon on the 7th of September. A half hour previous, while playing, he slipped on a banana peel and fell. Striking on the point of his right elbow and turning on this as a pivot he struck his right cheek and forehead.

On examination I found the external condyle prominent, olecranon lying over internal epicondyle, and the head of the radius on the trochlea, where it could be felt rotating. A depression existed between the olecranon and external condyle. Passive flexion and extension were very limited; pronation and supination possible but very painful. Reduction was easily accomplished by drawing on flexed forearm in a line with the humerus, and pushing the olecranon outward, while the humerus was being firmly held by an assistant. Immediately after reduction the severe pain disappeared, and extension and flexion, pronation and supination were almost perfect, but painful. The radius had returned to its normal position.

The treatment consisted in immobilization of the elbow by means of a posterior felt splint fastened with crinoline bandages.

Sept. 11, four days after the injury, I removed dressing and found extensive ecchymosis and some swelling, some tenderness over the joints and several bullæ on forearm.

On Sept. 21, I removed splint and placed the arm in a sling. Liniment was ordered to be rubbed into the arm about the joint twice a day.

I did not see case again until I sent for him a month after and found him still carrying the arm in the sling, although I had told him to carry it there for one week only, and then to let me see him again.

The result is almost perfect, there being

only a slight impediment to full flexion and extension. He is able to shovel coal and do other hard work without inconvenience.

This is a rare accident, as only five cases, according to Prof. Hamilton, have been recorded. A sixth case was reported by Prof. T. F. Prewitt, of this city. Of these two were mistaken for fracture, and in one no attempt was made at reduction; in the other an attempt was made five weeks after the accident, but failed; one Malgaigne failed to reduce, though recent; one was easily reduced immediately after the accident, and two were reduced with great difficulty after five and fifteen days respectively.

HOSPITAL NOTES.

By J. F. Edwards, M. D., Philadelphia, Pa.

REPORTED FOR THE REVIEW.

Philadelphia Hospital.—Service of Dr. W. S. Janney.—Psoas Abscess.

This man presents an abscess pointing (or rather with its orifice, for it has been open and discharging for some time) just below Poupart's ligament, one inch from the anterior superoir spinous process of the ilium. Dr. Janney introduces a long German silver probe and endeavors to find its point against the back, if he does so he will make a counter-opening, to secure free drainage. With the probe he can feel the eroded surface of the upper part of the sacrum or the last lumbar vertebra, but after patient labor is unable to feel the point of the probe at the back; he therefore dismisses the case for the present and will try again at some future time.

Palmar Abscess.

A man will sometimes receive a bruise or contusion as this man has, from handling an axe and the inflammation will follow the course of the fasciculi extending from the connective tissue down to the deep fascia, setting up an inflammation and suppuration in this latter place. A very slight injury, even a slight prick, may set up deep seated inflammation away down near the periosteum. These abscesses should be opened as soon as you detect pus.

Strangulated Hernia.—Artificial Anus.

This young man had, some time ago, a strangulated inguinal hernia, for the relief of which he was operated upon at the German Hospital. The gut was found gangrenous and consequently was left in the wound and an artificial anus was the result. Later, an operation was performed for the relief of this deformity and after ten weeks the wound was nearly entirely closed and most all of the feces were passed by the natural channel. He was allowed to get up too soon however and the artificial anus opened up again. If he had been kept on his back for five or six months Dr. Janney believes the cure would have been permanent. The orifice is near the position of the internal inguinal ring, a little below the middle of Poupart's ligament. This is a serious deformity for a young man to contemplate carrying through life. Since he passes some feces by the bowel even now (showing that its calibre is not occluded) Dr. Janney is inclined not to interfere, but rather to keep the patient on his back and see if Nature will not work a cure.

Hernia.

The doctor commences a course on hernia, but since the substance of his remarks can be gleaned from text-books, we will not reproduce them. Some of his general remarks, however, we give. Nearly two-thirds of all patients operated on for strangulated hernia die, not through any fault of the operating surgeon, but because the physician has persisted so long in manipulation, before calling in the aid of surgery, that the gut has been damaged beyond redemption. Some men will work for hours and even days trying to reduce an irreducible hernia. Taxis should never be practiced more than from five to ten minutes at a time and should be very gentle. If this, when intelligently applied (with a good knowledge of the anatomy of the parts) fails, the surgeon should be summoned. He was recently called upon to operate and he found that a very intelligent and prominent physician had persisted in taxis, when the cecum, part of the ilium and part of the colon was in the scrotum, until he had torn the gut in five or six places and feces had extravasated.

Service of Professor D. Hayes Agnew.—The Early Removal of Morbid Growths.

Dr. Agnew brought before the class several cases of jaw surgery to show the results of operation, and remarked that operations about the jaw usually do well; they heal up rapidly and leave less deformity than one would be led to suppose, because there is so much fibrous tissue in this locality that proliferates extensively and fills up the wound. He then operated upon a case of epithelioma

near the zygoma, that commenced seven years ago as a scab and steadily progressed until it is now as large as two silver dollars. Dr. Agnew here took occasion to add his powerful testimony to the recommendations of Mr. Jonathan Hutchinson and the late Professor Gross, in reference to the early removal of morbid growths. It may be remembered that Mr. Hutchinson describes what he calls the pre-cancerous stage of cancer and believes that if growths are excised in this stage, they will not recur; while Professor said that even though a growth be benign, it will ultimately call for removal on account of its size; hence it is well to remove early all growths; if they are malignant we have accomplished Mr. Hutchinson's desideratum, while if they are benign, no harm is done, (the operation being so trifling when taken early) and a deformity is removed. Dr. Agnew emphatically urges the early removal of morbid growths.

Jefferson Medical College Hospital of Philadelrhia.—Service of Professor J. M. Da Costa.—Boulimia.

Dunglison defines this disease as an excessive, a canine appetite, sometimes observed in pregnancy and hysteria, but rarely in any other condition. The patient whom Dr. Da Costa exhibits, is a grocer aged 24 years, who has an extraordinarily inordinate appetite. He is always hungry and grows faint if he does not eat. He has been so afflicted for eight years, gradually getting worse. He can give no cause for his trouble, saying that it came on gradually, without any appreciable cause. He, himself, thought that he must have tape worm, but he has never passed any segments and never had any other symptoms of this trouble. He is not troubled with thirst. His weight is about one hundred and sixty pounds; he always loses about twenty pounds in summer (though he always eats the same) and regains it in winter; neither heat nor cold affects his appetite. Strictly speaking, he is not really hungry, for he could do without this excessive amount of food, but if he did so he would become very faint, therefore, it is more correct to say that he has an excessive craving for food. He has this craving about every three hours during the day. He has no dyspeptic symptoms and his bowels are opened two or three times daily, the stools being soft, but not watery. His tongue is slightly coated, but he has no sour stomach. vomiting or flatulency. His color and general appearance are good. Sometimes, in convalescence, after acute diseases, patients will become faint, and will require food at frequent intervals, but they take it in small quantities. But it was not so in this case. He eats a breakfast of one pound of beefsteak, one quarter pound of bread and some potatoes and a cup of tea at 7 o'clock; at 10 o'clock he has stewed oysters, with bread or cakes; at 12:30 he eats a hearty dinner of roast beef, vegetables, and dessert; at 4 o'clock he has a pound of steak or some chops and at 7:30 he eats a hearty supper. (At this point Dr. Da Costa threw the class into a state of boisterous merriment for several seconds, by asking the man whether he lived at home or at a boarding house). He sleeps well and does not get faint at night. If, however, he should take his supper as early as 6 o'clock, he will wake early in the morning very faint, but if he has the last meal at 7:30 or 8 he feels fairly well in the morning. He has no excessive urination, so that there is no undue strain upon his tissues. This is a very singular case. His heart is normal, while there is no increase of hepatic or splenic dullness. There is no evidence of malarial taint, and while there has been some specific infection, it occurred subsequently to the boulimia. In many of these cases there is gastric catarrh; none here. The lesion of this disease, so far as we knew, is in the nervous system, most probably located about the centres near the origin of the pneumogastric nerve and the centres that preside over digestion. Dr. Da Costa once had a patient who eat eleven meals daily, but he was pale and thin. It would seem that in these cases, for some reason, all the nourishment is not taken out of the food ingested, some of it goes to waste. It is true, but incomprehensible, that some very light eaters are very fat, while heavy eaters are not, by any means, always corpulent; there is some peculiarity, inherent in the individual, that we cannot fathom. It may seem ridiculous to call this man sick, but, for him it is a serious matter, not alone on account of the craving, but because of the oft-repeated faintness. Can we check this condition? Yes! Fluoride of calcium will undoubtedly do so, but it has its drawbacks; it pulls down the strength, weakens and depresses a man and produces nausea. Therefore he hesitates about using it, until he has tried something else. In this case we will order bromide of sodium, fifteen grains, thrice daily, in mint water, for its general quieting effect on the nervous system. He will be allowed to eat as heretofore.

Gastralgia.

This girl, aged 19, comes to us complaining of great pain in the epigastrium, which is not constant, but paroxysmal. Her functions are

regular in every respect, no dyspepsia, bowels regular and menstruation normal. She has had this pain for four weeks and it came on altogether irrespective of the ingestion of food, occurring sometimes in the middle of the night. It is occasionally so severe that she faints, and it lasts for an hour or two at a time. Mustard plasters will afford a little relief, but not much. The pain is so severe as to cause beads of sweat to stand out on the forehead. There has been no vomiting, and her appetite which was poor, has been improved by tonics. Her tongue is clean and there is no tenderness on pressure in the epigastric region. She will have four or five of these attacks in twenty-four hours. The heart is normal—urine negative, no sugar, no albumen, Sp. gr. 1018. This is a pure case of gastralgia, especially pure because the usual gastric disorder is not associased with it for we oftentimes have gastric catarrh. Sometimes it is purely a reflex neurosis, due to constipation, etc., uterine or kidney disease, but here it is a pure neuralgia unassociated with any organic disease or reflex phenomena. This is the rarest form of the trouble. Gastralgia is a very difficult disease to cure. In this case he will order the absolute milk diet, so as not to increase the hyperesthesia, the excessive irritability of the stomach that already exists. Lime water may be added, one tablespsonful to each tumbler of milk. This girl should take from three pints to two quarts of milk daily. If this diet becomes too irksome, he will allow two soft boiled eggs, but absolutely nothing else. He will also order three drops of Fowler's solution of arsenic thrice daily and gradually increase to five, six or eight drops. You cannot give immediate relief of the pain, but must strike at the cause, though she may derive some comfort in the paroxysms from extract cannabis indica gr. ($\frac{1}{8}$) and extract of opium gr. ($\frac{1}{4}$) in pill form, one every half hour until she has relief. But they must not be taken too freely for fear of producing constipation. In this case there is no anemia, the girl is hearty and ruddy.

Hemiplegia, Aphasia, Purpura.

This man, aged 27, (though he looks much older) has purpuric extravasations all over his leg, that have been there for a week and are fading away. He has a mitral regurgitant murmur, which was recognized two years ago, there is also cardiac enlargement. In 1882 he lost the power of speech, which has never come back, though he can now say a few words; his intelligence is good. At the time of the aphasic seizure, he had also complete hemiplegia, which is gradually disappearing. This man has evidently had a coagulum carried from the diseased heart to the brain and lodged in the third left frontal convolution, the seat of speech, shutting off its blood supply; a clot has also interfered with the circulation in the motor centres, giving rise to the hemiplegia. His blood must be disordered or we would not have the plugging and the purpura. Hence we must direct our remedies towards the blood and the blood vessels. There is no drug more efficient than ergot, when you have these two indications to fulfill. However, ergot is a decided cardiac stimulant, so that in such a case it must be used with care. He will, however, use it for a time, ordering half a drachm of the fluid extract in half an ounce of simple elixir, thrice daily. This will cure the purpura. He will prescribe a light diet, and keep the bowels open and regular to avoid venous congestion. For the paralysis, he will use a moderate Faradaic current two or three times a week.

Tinea Circinata.

Here is a cutaneous eruption that has been out for four or five weeks. It is localized in the fore-arms and there is no specific history. It itches a great deal and is spreading some. The most obvious diagnosis here is psoriasis, but this would be wrong. Psoriasis is rarely acute in its onset, it comes on gradually, here and there a patch, it takes months to develop and is not limited, seeking with a special preference however the flexures of the joint. It may itch or not. This is a parasitic disease; some of the scrapings under a microscope, would show the tinea. It is contagious, and this man may inoculate himself with the disease on some hitherto untouched surface; here we see it commencing in the lip. The treatment must be local. If we were not careful to differentiate this disease from psoriasis, we might prescribe purgatives and arsenic, by which we would only do harm. The old remedy of putting a copper penny in vinegar and using the liquid locally has much to recommend it, for we here have acetate of copper. We may use corrosive sublimate or ointment of nitrate of mercury, carbolic acid or the sulphites. Dr. Da Costa is very partial to the sulphite of soda using.

R.	Sodii Sulphit. - -	ʒiii.
	Glycerinæ, - -	ʒii.
	Aquæ, - -	℥iii et ℥vi.

He washes with this and covers the surface with oiled silk.

SELECTION.

CASE OF LITHOTOMY OF THE GALL-BLADDER.

By J. S. Bobbs, M. D., Indianapolis, Ind.

(Transactions, Indiana State Medical Society, 1868).

K. W., aged 30 years, requested my advice by the request of Dr. Newcomer, for an enlargement of the right side. She is of spare habit, medium size, and nervous temperament. Has usually enjoyed pretty good, but never robust health. About four years ago she observed an enlargement in the right iliac region about the size of a hickory nut. Its position she represented to have been low down in the iliac region. There was no tenderness of the part. Her health at the time was bad and continued so for several months. She had neuralgia of the stomach, and food and drink created much distress. This was produced by much exercise also, and usually lasted three or four hours. The enlargement continued to increase in size, and became tender after exercise, and ultimately disabled her from walking, or, as she expressed it, "last winter, (1867) she could not put her foot to the floor."

Since January, 1867, the enlargement has grown faster and gives more trouble. Examination revealed a tumor just inside the right iliac bone, tender to pressure. Its outline could not be well made out, except on the right side, where its boundary was pretty distinctly defined. The most prominent part could be traced on its lower border, while the inner margin, toward the spine, was less distinctly defined, and its upper limits still more obscurely marked. It admitted of a slight degree of motion from side to side and upward, but its movement left it uncertain whether the most prominent portion was the chief part of the enlargement, or only a projection from a deeper seated growth. The walls of the abdomen were tense, and slightly protuberant.

The most careful examination per vaginam and otherwise disclosed no connection with the uterus or its appendages, although the limited motion in the parts did not demonstrate that no such connection existed.

The uterus was tender, and did not seem to be enlarged, as it could not be felt above the pubis. The patient was exceedingly anxious to have something done for her relief, as she could not take any exercise, or follow her occupation of running a sewing machine, without its being followed with pain and tenderness of the parts, and which extended down the right limb. So much obscurity surrounded the case that I requested further examination and consideration at some subsequent period, before attempting to diagnose the character of the tumor. This examination was made, but revealed nothing new, and tended to confirm the opinion partially arrived at on the previous occasion, that the enlargement had no connection with the uterine organs; but beyond this, nothing definite as to its character or connections could be made out. It had the position and appearance of ovarian tumor, and the patient so regarded it, from the opinion of other physicians whom she had consulted. She was informed that its ovarian character was very doubtful, and its true nature very uncertain, and that if it were the former I could give no assurance that it could be successfully removed. She, however, so persisted in the request that I should undertake its removal, that I finally consented to make the attempt, and on the 15th of June, 1867, assisted by Drs. Newcomer, Todd, Comingore, Mears, Moore, Avery, and a medical student, proceeded to do so.

An exploratory incision was made between the umbilicus and pubis, the patient being under the influence of chloroform. The omentum was found to be thickened and adherent to the walls of the abdomen. It was separated by a finger, so far as this could reach, toward the right side, along the whole extent of the section—about four inches in length—in hopes of reaching some part where no adhesion existed. Failing in this, with two fingers of either hand the omentum was torn through over the tumor, so as to admit the finger which came upon the protuberant portion of it. Passing the finger around this, some adhesions were broken up and the tumor traced upward. Other adhesions which it had formed with the parts around it, were also discovered, and what seemed to be a smaller lobe in its upper part, but no pedicle or attachment could be felt. Enlarging the opening through the omentum, the tumor was plainly visible, but the orifice would not admit of its exit. The wound through the abdominal walls was carried an inch above the umbilicus on the right side, over the prominent part of the enlargement, which was made to pass through it. This was found to be oval in form, about five inches in length, and two inches in diameter at its widest part, tense, and evidently contained a pellucid fluid.

No pedicle could be made out, and the sac showing its contents to be transparent, its lower margin was cut through, when a per-

fectly limpid fluid escaped, propelling with considerable force, several solid bodies, about the size of ordinary rifle bullets. Introducing the finger other bodies were felt, but not in the main sac. A number were hooked out with the finger, and varied in size from that of a mustard seed to that of a bullet.

One of the latter size could be distinctly felt, but no communication between the space containing this and the main sac could be found, and it was not removed, being situated at the extreme end of the finger. The sac had the appearance externally of an hydatid, its walls were of the thickness of ordinary cuticle, smooth in its inner aspect, and were whitish and semi-pellucid. Pulling it downward, after being evacuated, brought into plain view the right lobe of the liver, to the lower surface of which it was attached by a broad linear base, like the gall bladder. The finger introduced into the sac detached what seemed to be smaller sacculi opening into the main one.

It had the appearance of an enlarged gall bladder, or an appendage to this although its size, the clear, serous character of its contents, and the thickness and semi-transparency of its walls, might justify some degree of doubt upon this subject. From its form, attachments, and solid accretions, one of which could be so distinctly felt in a diverticulum, but which I did not succeed in removing, seemed to mark its identity with the gall bladder, and deterred me from the excision of the sac, as I should otherwise have done. I therefore put a stitch in the cut lips of its walls and cut the ends closely. This step was suggested by the apprehension that if any portion of its solid contents should have been overlooked, their escape into the cavity of the abdomen would be prevented, and the belief that the sac, in the event of its refilling with fluid, would become adherent to the walls of the abdomen, and be within the reach of a trocar, and make it practicable to obliterate it by means of an injection, if it became necessary. It would have been gratifying to have determined the condition and relation of the parts more satisfactorily; but the adhesions existing, as the result of past peritoneal inflammations, rendered this impracticable without increased hazard to the patient. The wound was closed by sutures and adhesive plaster, no vessel requiring to be ligated, and thirty drops of laudanum given after the patient was placed in bed.

16th, 8 o'clock A. M. The patient was slightly feverish; had slept half the night; complained of some soreness on both sides under the ribs. The abdomen very slightly swollen on the right side, which was tender to pressure. Urine was removed by the catheter, as it had been the previous evening. Ordered all company to be excluded, great quietude, and no more movement in bed to be allowed than became necessary to relieve her posture when it became irksome. As she complained of her bed another was placed along side of it, upon which she was removed.

17th. Somewhat feverish; pulse 100. Slept some last night; drank some lemonade. Complained that the laudanum made her sick. Taste bad. Lies on either side or back. No increased fullness of the abdomen. Wound uniting.

Evening. No fever, skin moist, is very cheerful, urine drawn off, although she desires to rise and pass it.

18th. Complains of some general soreness and chilliness. Lay at an open window after a rain storm, and thinks she took cold; the weather having become suddenly cool after being very warm. Ate an egg for breakfast and some rice for dinner, which tasted better than anything taken since the operation. Pulse 95, and full. Can lie on either side or back. Thinks she is not quite so well. Abdomen less full and tender to pressure.

19th. Morning. Is comfortable, except the dysuria. Have not permitted her to rise as she requested, the catheter having been used twice a day since the operation. Is subject to trouble about the bladder, and was much annoyed with it before the operation, being compelled to pass urine at short intervals. Did not think this of sufficient importance to make it known before the operation. Pulse quiet. No fever. Took some breakfast which relished better than usual.

Evening. Began to complain of the bladder soon after morning visit, when I drew off half a pint of urine. This continued all day, and at 5 o'clock she got partly out of bed and passed some urine. Can never pass urine unless in an upright position. Pulse some disturbed, being 110. Skin warm, but not hot. No fullness of the abdomen. Complains of pain in the left side under the short ribs. No increased tenderness of the abdomen. Passed but little urine when up. Constitutional disturbance more marked than at any time since the day after the operation, but not very marked.

Ordered, bicarbonate soda, gr. 5; bi-meconate of morph., gr. 1–10; to be repeated every two hours until relieved. Also, 25 drops of laudanum to be added if necessary after the first portion. Fomentations to the abdomen.

20th. Morning. Removed half a pint of urine, which gave much relief.

She slept part of the night. Pulse 110. Some fever. Tongue sticky, which she charges to the laudanum taken. No fullness of abdomen or increased tenderness. Complains of pain on the left side, under the ribs. Thinks she can not move herself so easily. Can lie on either side, but best on the right, but lies mostly on her back, with the knees drawn up. Took a cup of tea.

Evening. Is a little feverish; pulse 110. Drew off half a pint of moderately high colored urine. She ate a few strawberries, a slice of bread, and drank a cup of tea at noon. The wound looks closed, the ligatures and plasters not having been disturbed. During the previous night had taken three portions of soda and morphia, and once 30 drops of laudanum, which have been obvious in their quieting influence during the day. One portion of the former was given at noon, and another ordered to be given at night, with the laudanum in addition, if necessary, to secure quietude. The bowels having been well evacuated before the operation have not acted since. Fomentations to the abdomen to be continued.

21st. Morning. Removed half a pint of high colored urine with much relief. Took one portion of soda and morphia during the night. Slept some; pulse 110. Skin warm, but perspirable. No tumidity of the abdomen, and less tenderness. Mouth sticky from effects of laudanum. Drank a cup of tea.

Evening. Complained from 12 o'clock M., of disposition to urinate, which gives her much distress. Removed half a pint of high colored urine. Has taken three portions of the solution of soda and morphia during the day. The pulse is some excited, and skin warm. No tumidity of the abdomen. A healthy discharge is issuing from one point in the wound. No increased tenderness of the abdomen. Ordered the soda and morphia to be continued when required.

22d. Morning. Rested last night after taking two portions of solution and 25 drops of laudanum. Removed half a pint of high colored urine, with alkaline smell and some turbidness. Pulse 100. Skin warm and moist. Tongue slightly coated, and mouth pasty. Removed the dressings and stitches from the wound, and replaced adhesive straps. The wound was adherent in most of its extent. Some thick pus issued from one point, at the junction of the lower with the middle third of the wound. Abdomen less full and much less tender. Feels much better, and complains of nothing but urinary trouble. Allowed her clothing to be changed, which she has begged permission to do for several days. Direction: Ext. hyosciami, ʒij; bal. copaib., ℥ij; spirit. nit., ℥ij. M. One teaspoonful to be taken three times a day, with fomentation to the abdomen.

From this period her recovery was progressive, and requires no special remark. In about two weeks she was permitted to sit up, and in three weeks to move about her room, and in four to ride out.

Careful examination of the solid concretions removed leaves no doubt of their being biliary calculi. They are irregularly spherical in shape, smooth on the surface, which is of a mahogany color, and polished. The interior is of a whitish yellow, striated and porous. They are of light specific gravity, and numbered some forty or fifty, the majority being of the size of small shot. When access to the enlargement was reached, the surrounding parts were so agglutinated by old adhesions as to prevent a satisfactory inspection of the deeper portion. After the sac was opened more space was obtained, and the attachment to the under surface of the liver could be both seen and felt, and had the appearance of an hypertrophied gall bladder. Its lower extremity projected about five inches from the free margin of the liver. The cystic duct was probably obliterated from irritation produced by these concretions, and the one felt at the extremity of the fingers was probably lodged in one of the biliary ducts. Various authors have reported cases of hypertrophy of the gall bladder, but I believe they have usually found traces of healthy or vitiated biliary matter in the fluids contained in the cysts. In this instance the fluid was perfectly pellucid and watery, the solid and coloring matters having either been appropriated by the concretions, or had become absorbed or diffused. The patient's complexion was somewhat sallow, but no more so than is frequently observable in those suffering from organic disease. She was rather anemic.

Since the operation she has had intermittent fever at intervals, and impaired digestion, and at such invasions complains of pain in the region of the enlargement. At other times she suffers no inconvenience, and is able to pursue her calling of working a sewing machine. No appearance of the enlargement recurring is observable, up to the present, ten months since the operation.

—The anti-vaccination league, of New York city, will incorporate itself as the American Anti-vaccination Society. Henry Bergh is identified with it.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, Nov. 21st, 1885, the President, Dr. Atwood, in the chair.

Intussusception, Involving the Entire Colon.—Specimen.

Dr. Thornton, in presenting the specimen, stated that last Saturday Dr. Bernays, Sr., was called to see a child with hemorrhage of the rectum. Upon arriving it had ceased. On Sunday morning a small amount of bloody serum had escaped. On Monday there was some pain, and, as no action of the bowels had taken place for three days, a dose of castor oil was administered. This did not act, and the injections given came away clear. On Tuesday a small dose of calomel did not act. Wednesday there was vomiting, not stercoraceous, and on Thursday the child died. The post-mortem revealed an intussusception of the entire colon, as seen in the specimen.

Dr. Green inquired if the hemorrhage was sudden, without previous illness.

Dr. Thornton said that the child was playing around the house and did not complain.

Dr. Green thought that the castor oil had aggravated the condition. He thought that the suddenness of the attack ought to provoke suspicion. An operation might have relieved the patient.

Waxy Kidney.—Congenital Absence of One Kidney.—Double Uterus.—Specimens.

Dr. Hulbert, in presenting the specimens, said that the patient from whom they were obtained was a colored woman, aged 35, IV-para, who was affected with Bright's disease, disease of the heart, a sinus over Poupart's ligament in the right side, and syphilis. She died about a week ago at the Female Hospital. Upon post-mortem examination the diagnosis was confirmed in regard to the heart and kidneys. Of the latter the right one was left; on the other side, after considerable search, a flat rudimentary kidney was found with a short ureter and no corresponding opening in the bladder. The uterus is double the right one only having been impregnated. The opening of the left one goes into the cervix of the right one. There are two Fallopian tubes and two ovaries, one to each uterus. The sinus above Poupart's ligament communicated with a pelvic abscess, connected with the broad ligament. The liver was the seat of syphilitic (tertiary) infiltration. She had kidney trouble for two years and had cystitis for six or eight months.

Dr. Bremer thought the specimen remarkable, chiefly because each uterus was so perfectly developed. He had seen several, but none like this; generally there is only a septum. The rudimentary kidney was of fetal origin, probably due to some intra-uterine injury. The other kidney illustrated the peculiarity of all syphilitic affections to form first by hyperplasia of the connective tissue and then be followed by shrinkage and consequent atrophy. A great many syphilitics in the tertiary stage die of syphilitic interstitial inflammation.

Dr. Hulbert, when he first took out the kidney, looked upon it as amyloid degeneration.

Dr. Bremer stated that amyloid degeneration existed in three diseases: Syphilis, tuberculosis and long continued suppuration. In syphilis we find it in the secondary and tertiary forms.

Dr. Dibble inquired if there was any method of making a diagnosis independently of the history.

Dr. Bremer stated that syphilitic disease of the kidney in its first stage is very mild, and might pass for catarrhal nephritis; in later stages it would be like croupous nephritis. He did not think that clinically it could be determined; even a post-mortem will not always determine it. In the case presented, however, there was syphilis of the liver.

Dr. Pollak asked if it could be determined as syphilitic by a pathological examination.

Dr. Bremer thought that the use of the iodine reaction and diagnosis by exclusion would probably lead to discovering syphilis as a cause when it existed.

Hydrophobia.

Dr. Bremer spoke of Pasteur's preventive inoculations for hydrophobia, saying that it was stated that he had eighteen cases on hand now. This seemed a large number to gather in so short a time, and he wished to know how many cases different members had seen.

Dr. Dorsett had seen a case two years ago. The man had been bitten six months before in the hand. He was sent to the City Hoipital and died before the next day.

Dr. Pollak, in 1862, saw a man who had been bitten by his dog. He cauterized and dressed the wound, and nine weeks later he developed full symptoms, and died twenty-four hours later.

Dr. Scott reported an interesting case four

years ago. The patient died at the City Hospital.

Dr. Jordan, some fifteen or sixteen years ago, saw a case which was undetermined. The woman had been bitten in the arm three years before. It was somewhat similar to hysteria in some respects.

Dr. Hughes said that a simulator of hydrophobia is lisophobia. He saw a case of hydrophobia in company with Dr. Pope. He did not think it remarkable for Pasteur to have so many cases, considering his world-wide reputation and easy accessibility. Scarcely a day passes but we find a case of hydrophobia recorded in the newspapers. These cases of hydrophobia are characteristic for possessing the intellect intact during the earlier periods.

Dr. Prewitt has seen two cases, one a man in the City Hospital, who had no violent symptoms; the other, a boy, had a period of incubation of three months. The period of incubation seems to be pretty fixed in all infectious diseases except hydrophobia.

Dr. Atwood saw a case in 1863. He died soon after, and his boy, who was bitten soon after, had no symptoms. About one in twenty who are bitten contract hydrophobia. It does not appear possible that Pasteur should have so many cases, when we consider that the disease is of such short duration after its incipiency.

Dr. Bremer said that the question was how many prophylactic cases he had.

Dr. Coles said that they were very particular to keep statistics in regard to cases of hydrophobia. One hundred and twenty-five persons are said to be bitten every year, and ten or twelve develop symptoms.

Dr. Scott inquired whether those who contracted hydrophobia might not possess some idiosyncrasy, rendering them more liable to the effects of the poison. He lately had a suspicious case, and was keeping it under observation. He never allowed the dog to be killed.

Dr. Dibble stated that statistics were unreliable, as the dog was always killed, and it could not be ascertained whether he had hydrophobia or not.

Dr. Prewitt said, in an article, that a boy, bitten by a rabid dog, was brought to Pasteur, who took the attenuated virus and kept inoculating with stronger preparations until he reached the full strength. A hundred days have passed without any symptoms, and, whether the boy had hydrophobia or not, the inoculation gives strong evidence of being a prophylactic.

Dr. Atwood thought the boy did not have hydrophobia, as he traveled all the way from Alsace to Paris.

Dr. Prewitt said this was immaterial. He was inoculated with the products of hydrophobic rabbits.

Dr. Thornton had read of Pasteur's experiments. He had also seen the claim of a German professor that hydrophobia consisted in a hyperesthesia of all the special nerves, and, in fact, of nearly all the nerves.

Dr. Love had seen one of the cases Dr. Prewitt spoke of. There was no spasm except on attempting deglutition. He had seen another case having about the same symptoms.

CORRESPONDENCE.

NEW YORK LETTER.

New York, Nov. 21, 1885.

Editors Review:—An interesting laparotomy was recently performed at the Mt. Sinai Hospital. The tumor necessitating surgical procedure was a fibro-cystic growth of the left ovary, and weighed nearly forty pounds. The right ovary had already taken on cystic enlargement and was also removed. Dr. A. G. Gerster, one of the attending surgeons of the above named institution, has recently adopted a new method in the removal of the axillary contents in cases of mammary cancer. The usual plan has always been to remove the cancer first, and then proceed up to the axilla. Before operating thus, Dr. Gerster, on one occasion, injected a quantity of milk into the tumor. Traces of it were found in the axillary glands when the latter were reached. He argued that the necessary manipulations of the neoplasm had driven the fluid upward. This being granted, he thought that manipulation might disseminate cancer cells in the same way, and thus the way be prepared for secondary deposit. He now removes the axillary contents first in cases where such removal is deemed necessary, thereby avoiding the danger mentioned above.

At a recent meeting of the New York Academy of Medicine a eulogy of the late James L. Little, M. D. (Professor of Surgery in the New York Post-Graduate School, and attending Surgeon to St. Luke's Hospital) was read by Dr. D. B. St. John Roosa. A paper by Dr. Paul F. Mundé, on the Use of Electricity in Gynecology, was also read at the same session.

New cases of small-pox continue to develop from time to time in various quarters of the city. Heretofore, whenever there has been an outbreak of the disease in Canada, this city has regularly suffered, and the disease has remained endemic

for two years. At present outlook, it seems as if the usual precedent has to be followed.

Work on the new property of the College of Physicians and Surgeons has been suspended for the present. It seems that legislative action to change their charter is necessary in order for them to hold their new donations from Mr. Vanderbilt. The delay will probably be only temporary.

In connection with the regular lectures on practice, Professor Delafield is giving some very interesting demonstrations of pathological specimens, by means of lantern-slides—containing between them double plates—actual sections of tissue, magnified images of which are thrown on a large screen.

The sum of a quarter of a million dollars, the bequest of the late John P. Howard, of Burlington, Vt., is to be divided equally among the following institutions here: New York Juvenile Asylum, St. Luke's Hospital, New York Orphan Asylum, Children's Aid Society, New York Society for the Relief of the Ruptured and Crippled, and two charitable institutions in his native city.

The recent division of the members of the New York Academy of Medicine into sections has greatly stimulated that body. At recent meetings of the sections on Practice, papers have been read by Dr. W. H. Thomson, on "Aphasia," and Dr. R. C. M. Page, on "Bright's Disease." An interesting discussion was opened by Dr. W. H. Draper as to whether Croupous Pneumonia was an inflammation or a general disease. Dr. J. Henry Fruitnight recently read a paper before the Society of Medical Jurisprudence and State Medicine on "Compulsory Vaccination."

Several interesting specimens were presented at the last meeting of the Pathological Society. On behalf of a candidate, a uterus was shown, taken from a woman who died of typhoid fever, occurring during the puerperal state. The organ itself was normal, and the chief interest centered in the clinical history of the case, and the fact that it was not possible to make a positive antemortem diagnosis. The president, Dr. John A. Wyeth, presented a specimen of a double hernia of enormous size. On the right side the sac contained the vermiform appendix and ten feet of intestine. Gangrenous decomposition was present. The patient, a German, 53, married, cooper, was admitted to the Mt. Sinai Hospital only a day or two before his death. His condition precluded operation, and as he grew steadily worse, he was narcotized to ensure euthanasia.

Dr. Van Santvoord presented specimens of double hydrocele (from an infant two months old, there being no communication with the abdominal cavity on either side), and also of lupus of the larynx, following from a similar lesion of the face. The patient was a boy of 14. The process of disease had destroyed the lips, nares, and part of the alveolar processes of the upper jaw; also the hard and soft palate, with the body of the sphenoid bone. Towards the end of the disease, he developed symptoms of meningitis which eventually proved fatal. The autopsy showed the base of the brain covered with lymph, a sloughing condition of the dura mater over the sella turcica, necrosis of the body of the sphenoid bone, and a waxy condition of the liver, spleen and kidneys. An interesting discussion arose as to the identity of lupus and tuberculosis. It seemed to be the consensus of opinion that if we were to define as "tuberculous" any process where the baccilli were present, such an identity clearly existed. Dr. Waldstein presented a specimen of cheesy retro-peritoneal glands, and Dr. Prudder, a specimen of necrotic cystitis.

J. E. N.

ITEMS.

—Dr. Antonio Fibbi, on September 2, performed the operation of laparotomy for the removal of an enormous suppurating echinococcus cyst of the spleen. The seventh day after operation the patient was in a favorable condition, and recovery seemed probable. At no time after the removal of the tumor did the temperature rise above the normal.

—The professional nomenclature of diseases of the royal college of physicians and surgeons of London, will be adopted permanently by the marine hospital service, after January 1.

—Miss Angelina M. Brown, of New York, has sued Drs. A. S. and A. W. Purdy for $10,000 damages for causing her removal to a small-pox hospital when she was not sick from that disease.

—Superintendent Bell, of the foreign mail service, post-office department, has requested Surgeon-General Hamilton to have all mail matter coming from Canada fumigated at the exchange offices on the Canadian frontier.

—Revulsives in the Treatment of Sciatica.—Dr. Pagliani reported a large number of cases of sciatica which he cured by the application of a revulsive in the shape of a cerate made with senna. This plaster was kept on the part for seven hours, and followed by baths of hot, dry air. Some twenty-one cases of cure were attested. (Paris Correspondent of Philadelphia Medical Times.)

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ANTIPYRINE.

The novelty and manifest value of this drug justifies us in offering our readers the results noted by those that have had great experience with it, even should many of the facts already have been recorded in our pages. The corroborative evidence of a series reports can alone acquaint us with the indications that should guide us in our individual practice.

In L'Union Médicale of Nov. 10, Lèon Arduin writes on his study, clinical aud experimental of antipyrine, which he conducted with Mm. Huchard and Hénocque.

In first order he calls our attention to the "almost elective action of antipyrine in diseases of the lungs, and particularly in the fever of tuberculosis. A feature well to be borne in mind is, that small doses of a quarter or a half gram suffice to control or reduce such fever. A half gram suffices to reduce the temperature of hectic fever two degrees, and to maintain it so for several hours. A second and a third dose an hour apart lower the temperature one-half to one degree more and this reduction lasts for eight or nine hours. If, however, the antipyrine is given before the advent of the fever, it may be entirely aborted.

In acute pneumonia small doses accomplish the same good results.

In the eruptive fevers, typhoid, puerperal peritonitis, etc., large doses each of one gram at least must be employed in hourly repetition to affect the fever in a like manner. But in sufficient doses the remedy never fails excepting in intermittent fever.

Children bear the drug well; even babes at the breast may take it without digestive disturbances. But the doses must be small. One half gram should not be exceeded up to five years of age, and ten centigrams may be added for each additional year.

Ardruin in speaking of the disagreeable side effects that we are acquainted with, says that the smaller doses are not followed by nausea and profuse sweating. And thus, by exhibition of fractional doses, tuberculous night sweats offer no contraindication. The eruption that sometimes follows the ingestion of antipyrine is of no significance.

Now for the experimental study of our remedy. Arduin worked upon guinea pigs, rabbits and frogs, giving them immense doses, 50 60 centigrams per kilogram, hypodermically. He reports:

1. Most striking is the development of cloric and tetanic convulsions, paralysis and muscular rigor, and the disappearance and reappearance of reflexes, in short, a remarkable analogy with strychnine poisoning.

2. Clinical observation teaches that the heart is weakened in its pulsations; the animals experimented on died of cardiac paralysis. Spectroscopic examination does not show any influence upon the blood. Demme, however, designates antipyrine a protoplasma-poison. As regards arterial tension a great diversity of opinions prevails, the ones claiming to have noted a reduction, the others an increase of tension.

3. Respiration does not appear to be much influenced; a lesser frequency of the movements appears to be the rule.

4. The influence upon the secretion of urine is not well understood The sulphates are said to be augmented; urea and the total quantity of urine diminished.

The author next refers to the hemostatic influence of antipyrine as reported in the "REVIEW" of Nov. 21, and indicates that in hem-

orrhoidal bleeding suppositories of ½-1 gram of antipyrine would be a proper medication.

Arduin draws the conclusion from his knowledge of the hemostatic action of antipyrine, which he describes as sure and immediate, that it is destined to become a valuable surgical acessory. Following the line of modern thought, it readily presented itself to Arduin to investigate whether or not any antiseptic, antiputrescent qualities could be shown, that, together with the purely hemostatic action, would constitute antipyrine the heir apparrent in the direct line of succession of so many other surgical preferences, that started out with the predicate "Invaluable," (with a capital I"), and stand to-day predicated "valuable," (with a very small "v"), simply. Arduin is honest enough to state that his information regarding this point is not complete. But he is disposed to rank antipyrine as superior to salicylic acid as an antiseptic.

In conclusion Arduin offers as suggestions regarding the administration of antipyrine that two grand indications are given, namely:

1. Hyperpyrexia, 2. Continuity of fever. In reference to the first point Arduin asks us to remember that hyperpyrexia is not a fixed term but a figure that changes with each malady. Hyperpyretic temperatures alone should be combated.

As Huchard says: "In clinical practice there should be no antypyretic medication; none of anti-hyperpyretic medication. In other words, we should not attempt to make febrile diseases afebrile, but meet only such elevavations of temperature that are no longer typical of the disease but indicative of complications.

Concerning the exhibition of the remedy, the hypodermic mode has points to recommend it. A fifty or a hundred per cent solution may be employed.

Rectal administration may be by enema or suppository.

But the ingestion per os deserves the preference. The drug is easily soluble and the taste disguised by sweetened water or any corrigens

The small doses of one-fourth, one-half, three-fourth gram are the preferable ones in phthisis; from one to three grams in typhoid fever and acute fevers.

Never, to avoid any possible alarming features, give more than one gram at a dose. That suffices, and repetitions at hourly intervals accomplish all this precious medicament can.

Nerve Regeneration.

A remarkable case of nerve restitution after a serious traumatic lesion and complete muscular paralysis of long duration is reported by E. Hoffmann, in the Deutsche Medicinische Wochenschrift. A lock-smith, 31 years of age, fractured his left humerus and a complete paralysis of the musculo-spiral nerve was a consequence. Three months after the nerve was cut down upon and it was found that it had been torn wide asunder, The nerve was sutured and a primary union effected. Subsequent electric treatment was of no benefit at all, and finally discontinued. However, one year after the injury, seven months after the nerve suture, voluntary movement in the muscles to which the nerve in point is distributed first became barely possible and gradually quite a satisfactory function was reestablished.

Apomorphine as a Local Anesthetic.

The marvelous local anesthetic effects of cocaine have stimulated pharmacologists to search for other drugs of similar qualities. Bergmeister and Ludwig report in the Centralblatt f. die Gesammte Therapie, May, 1885, that the crystallized hydrochlorate of apomorphine possesses such virtues. Of a two per cent solution six to eighteen drops instilled into the conjunctival sac bring about a complete insensibility of the cornea and conjunctiva; this effect has a duration of from five to ten minutes. The conjunctiva becomes pale and assumes a shrivelled appearance. The epithelium of the cornea be-

comes slightly nebulous. Dilatation of the pupil accompanies these results.

General manifestations are usually observed in animals so dealt with; salivation, nausea and vomiting may ensue. But these attending symptoms soon pass away.

In man instillation of six to twelve drops during the space of ten minutes is followed by complete anesthesia. Some pain is experienced; the pupil dilates; malaise and vomiting usually occur.

These disagreeable effects have so far been constant attendants upon the local use as described. As long as they cannot be obviated the practical application of the anesthetic virtue of apomorphine is impossible.

Still, the fact is of interest.

Dr. Crook's Lectures.

Dr. James K. Crook requests us to publish the following Errata which appeared in his lectures on Phthisis in the Review.

Lecture I.—Page 318, 2d column, 26th line, read "possible" for "necessary."

Lecture II.—Page 336, 13th line, read "clear red" for "charred." Page 338, 1st column, 34th line, read "lung" for "being"; same page and column, 42d line, read "marked" for "masked;" same page, 2d column, 39th line, read "cracked ice" for "crackers in."

Lecture III.—Page 375, 2d column, 52d line, read "the respiration" for "it."

The fourth and concluding lecture of the valuable series will appear shortly.

Pasteur's Method of Inoculation Against Rabies, and Guerin's Objections. The Medical Record reports: The full text of Pasteur's description of his method of preventing rabies appears in the "Bulletin of the Académie de Médecine." Pasteur began by saying that, after innumerable experiments, he had discovered a prophylactic method both prompt and practical. It has proved so effective, applied to dogs, as to warrant M. Pasteur in applying it to all animals, even to man. Inoculation of a healthy rabbit, by trephining underneath the dura mater, from a spinal cord removed from a rabid dog, always produced rabies after fifteen days' incubation, on an average. Inoculation of a second rabbit from the first, of a third from the second, and so on through a series of inoculations, provokes a form of rabies presenting in each successive inoculation a shorter term of incubation. After a series of from twenty to twenty-five inoculations, the term of incubation is reduced to eight days. After a further series of from twenty to twenty-five, the term is again reduced to seven, which remains stationary up to the ninetieth. M. Pasteur, in his successive series of inoculations, has arrived at the ninetieth, and there is a very slight tendency in the term of incubation to be less than seven days.

These experiments were commenced in 1882, and they have been continued without interruption. The only virus used was obtained from a successive series of rabbits which died from rabies; consequently, a perfectly pure virus was used in these experiments, and one always identical. This, says M. Pasteur, is the great secret of the method (le nœud pratique). The spinal cord of these rabbits is rabid throughout. If a portion of a few centimetres in length be detached from these rabid cords, every cleanly precaution being carefully observed, and then suspended in dry air, their virulence slowly leaves them, and finally thoroughly disappears. The time required to destroy the virulence depends on the thickness of the fragment removed, and still more on the temperature of the surrounding atmosphere. The lower the temperature the longer the virulence persists. If the rabid cord be removed from contact with the air into carbonic acid gas, the virulence is maintained during several months, always provided no foreign microbes are allowed to attack it.

In order to render a dog refractory to rabies in a comparatively short time, M. Pasteur proceeds as follows: A portion of fresh rabid cord is suspended in a bottle containing dry air, fragments of potash being placed in it for this purpose. The period of incubation of the rabies is seven days. Every successive day

the dog is inoculated by passing under the skin the quantity of sterilized broth a Pravaz's syringe can hold, a small fragment from these desiccated cords having been previously mixed with the broth. The first inoculation is made with desiccated cord that has undergone some days' preparation, in order to be certain that it has entirely lost its virulence. The next inoculation is made with a fresher preparation, and so on until a virulent portion is used. Two days must elapse before a fresh inoculation is made. The last inoculation is made from a portion of cord which has been dried one or two days previously. The dog thus treated is rendered exempt from rabies. Inoculation under the skin, or on the cerebral surface, by trephining with the virus of rabies, fails to produce any symptom of this disease. By this method M. Pasteur rendered fifty dogs refractory to rabies without incurring one failure.

M. Pasteur had arrived at this period in his experiments, when two people who had been bitten by a mad dog arrived, on July 6th, at his laboratory, from Alsace. Theodore Vone, a wholesale grocer at Messengott, had been bitten on the arm on July 4th. John Meister, aged nine, was also bitten on July 4th, by the same dog; the child was bitten in several places on his hands, legs, and thighs; some of the wounds on the thigh were very deep, and caused him to walk with difficulty; the principal wounds were cauterized with carbolic acid at eight o'clock in the evening. The third person was the mother of Jacob Meister, who had not been bitten. M. Vone had his arm very much bruised, but he assured M. Pasteur that the bite had not passed his shirt. He was sent back to Alsace. On July 6th, sixty hours after the bite, Joseph Meister was inoculated. A Pravaz's syringeful of cord removed from a rabbit dead from rabies was injected under the skin on the right side. The rabbit died on June 21st; the marrow had been preserved in dry air from that date, a period of fifteen days.The following days fresh inoculations were made, morning and evening; each succeeding inoculation was made with cord more recently prepared; thirteen inoculations were made, covering a period of ten days.

M. Pasteur does not believe that the progressive attenuation of the rabid spinal cords enclosed in dry air is due to the action of the air. Facts that he will describe later on negatived this interpretation. He considers the cause more probably to be explained by the microbes, the origin of rabies, producing, during their cultivation, a substance endowed with a property hostile to their own development. Data already acquired concerning the modus vivendi of these organisms encourage the belief in this hypothesis. M. Pasteur will continue his researches on this subject, and publish the results. Since October 20th, M. Pasteur has had under treatment for rabies a young shepherd, fifteen years of age, who, on the fourteenth of the same month, had been badly bitten on both hands by a mad dog. The results of this further test of his prophylactic method against rabies will be made known to the Académie des Sciences.

At the close of Pasteur's communication, M. Jules Guerin rose, and after some difficulty obtained leave to put on record the following protests: 1st, That M. Pasteur made his inoculations with the virus of an artificial rabies, there being no proof that his rabbits really had the genuine disease; 2d, the patient on whom M. Pasteur had experimented was not a proper one, since his wounds had been treated with carbolic acid, and since bites of rabid dogs are not always followed by hydrophobia; 3d, M. Pasteur had only found a preventive for rabies, not a remedy for the declared disease.

Plantar Hyperesthesia.—Le Progrès Médical (Practitioner) reports: "An aggravated and somewhat peculiar form of plantar hyperesthesia is described by M. Barbillion. It is characterized by undue impressibility, on external stimulation, by heat, cold, pinching, pressure, etc., of both the soles of the feet, and of the soles only. It appears to be idiopathic; when it occurs in connection with other maladies no relationship, so far at least, can be made out. Five cases are recorded.

In each of them the symptoms occurred after long walking, or in persons accustomed to much exercise on their feet. In two cases, however, a considerable interval of rest in bed preceded the attack of hyperesthesia, which came on rather suddenly. These attacks, whose duration was practically unlimited, save by completely resting the extremities, were attended by no redness or swelling of the parts affected. In one case only a slight tendency to varices was observed. The sensations of heat and cold were easily distinguished, and cold was, of the two, more easily borne. Standing caused acute pain. One of the cases was complicated by general psoriasis, which did not exclude the soles, and by a tremor suggestive of cerebro-spinal disease, though other proofs of the latter condition were not found. This tremor, however, was transient, and the psoriasis persisted after cure of the hyperesthesia. M. Barbillion concludes that these were not ordinary cases of neuralgia, the character, continuance and locality of the pain being different. Neither were there any signs of disease of the central nervous system, besides the tremor alluded to. The general state of the body was otherwise normal. Rheumatic dermalgia due to exposure, and affecting other regions of the body in a characteristic manner, was also here excluded. Chronic contusion of the feet due to walking, on the other hand, does not usually show the excessive tenderness, nor the symmetrical distribution of this disorder, and its etiology is more distinct. The real pathological basis, according to this observer, probably consisted either in a chronic irritation of the nerve endings in the sole, due to the mechanical pressure of excessive standing or walking, or in a change of nutrition in the skin of that region having practically the same effect. The fact that the plantar tenderness in two cases appeared during the rest which followed over-walking and not during the period of exertion is quoted in support of the latter theory. This malady proved easily amenable to energetic treatment. Blisters applied to the tender parts effected a cure in two cases. The others recovered rapidly after spraying the part with methyl chloride. M. Barbillion recommends that the spray in such cases should be freely used. Should vesication follow, the salutary effect is the more certain, and a safeguard against any further sloughing or gangrenous condition is provided by the toughness of the cuticle in this region, by the good general health of the patient in such uncomplicated cases.—

Camphor Intoxication.—The Virginia Medical Monthly takes the following from the Journal of Inebriety: "In a late number of the Annales Médico-psychologiques, a long account is given of some unusual symptoms following an overdose of camphor, which lasted months after. The close resemblance to many cases where, after the first profound intoxication, the nerve and brain disturbances continued for months, will be apparent to all our readers. The case was a young man with no heredity of nerve disease, and in apparent good health, who for a slight catarrh and insomnia, took, by mistake, 300 grains of camphor. Soon after, he seated himself at the dining-table, felt chilly, lost power of speech, was bewildered, and finally cried out that he was crazy. A physician was called and emetic given, which brought up much of the camphor. He was taken to his room and, excepting some chills and hallucinations of vision and sensations of trembling, he recovered and was out in two days at his work again. Three weeks later, he suffered from severe headache, and had a well-marked hysteric sensation of choking, and when in bed, suffered from a sickening sensation of swinging. Later, exact idea of time was lost, everything seemed new at the beginning. Although able to work, all events seemed new and strange. Sensation of his height became perverted. He thought he was higher than the house, and suffered at the thought of the great disadvantages of his height. By striking himself on the head, he felt better. He went to an asylum, and was better at first, but finally fell into a mechanical state of existence. Was contented with everything, had no care for himself or any-

one, would talk and seemed to realize what was said, but had no interest, or continued memory of events. Two weeks later he recovered and went about as usual. After six weeks' residence, went home, and, on greeting his family, was thrown into a trance state, in which he could not talk or act; but yet fully realized what was said and done about him. Two weeks after, from some excitement in his family he had another trance state, and came out of it very weak and trembling. For a long time after, he was conscious of an unstable brain, which seemed balanced on a very slight point likely at any moment to turn over. Fragments of conversation went whirling through his mind, and at times his surroundings were all perverted. He would walk around and never remember what he was doing, or where he was; was somnambulistic. From this time the case continued to recover. The disorders of sensation, and hallucinations of the senses, which he seemed to partially realize, pointed to central brain disturbances, that were undoubtedly the beginning of very grave lesions. This poisonous dose of camphor either kindled into activity a latent nerve defect, that was a legacy from the past, or it produced some cell change in the great centers. This emotional instability, with disordered and changing sensations and hallucinations, presenting the most diverse and complex symptoms, are often seen in inebriates, although they have been months free from spirits. In other cases it follows a single paroxysm of intoxication, and lasts for months or years.

Prevention of Bad Teeth. — A foreign exchange (Medical and Surgical Reporter) says the troubles which arise from disease of the teeth, or from their loss, are not always directly referable to their cause. When actual toothache is present there is of course little doubt, and the remedy of extraction at once presents itself. At the same time, it must be remembered that the forceps do not undo the work of disease or make amends for its ravages. A jaw which has lost the best part of its function with its teeth, or which bites unequally with the scattered survivors of its former armament, is but a deceitful guardian of the passage to the stomach; while it seems to do duty in mastication, it passes intact much that is unfit for the immediate action of the gastric juice. Were the relationship between bad teeth and dyspepsia, with its consequent discomforts, better understood, we should probably hear less of the prevalence of dental caries. Greater attention would then be paid to the small organs whose obscure influence on the general health so fully justifies their preservation. Specific constitutional disease, drugs, and other special factors no doubt account for a certain amount of dental decay. Neglect, however, accounts for much more. Want of care in choosing food, and particularly in cleansing the teeth, has nearly everything to do with the dental worries of a great many people. A point well worthy of note in this connection is that most of the permanent set of teeth come into active operation during childhood or early youth. It is hardly to be expected that children, if let alone, will pay much attention to the state of their mouths, unless driven to notice an aching stump. Thus it happens that most children have lost one or several teeth before they are well into their teens. Here, then, there is need for parental supervision. Mr. W. M. Fisher, of Dundee, has been led by certain observations, which proved the defective condition of the teeth in a majority of school children, to suggest that some regular system of supervision by a dentist be adopted as a part of school management. The expenses he would have defrayed by the parents, or, should they be too poor, by the State, out of the education grant. This plan has actually been adopted in the parochial school at Anerley, in Surrey. We have long been of opinion that it would be most desirable if the health of children in all schools could by some plan be periodically passed under review by a medical inspector. The possible obstacle to such an arrangement would be the expense. This may not prove insuperable, and, if it do not, we may hope that this method, and also some plan of den-

tal supervision, may find their place among the recognized forms of school discipline.

Hypodermic Injections of Morphine in Uremic Convulsions.—S. Powell writes in the British Medical Journal: In the early part of this year I was attending a child aged six years for a slight attack of scarlet fever. At the end of a week the little patient was apparently well, though anemic. The mother was cautioned about the danger of allowing the child to be exposed in any way; but the caution was not heeded, and the child went in and out as usual. At the end of a fort-night the mother came to me, saying the child's face was swollen, and it was very sick and cross. On visiting, I found the usual train of symptoms of albuminuria, with dropsy. The skin was desquamating, and the child was excessively weak and anemic. I prescribed a purgative and an iron mixture, and ordered warm sponging and bathing. Three days after seeing the child in the above condition, I was suddenly called by its mother, as the child had been in a fit for an hour or more, and the convulsions were continuous. The child had one fit previously to this seizure, at 7 in the morning, which lasted about ten minutes. On my arrival, I found the patient in strong convulsions, perfectly insensible to all external impressions; and it appeared certain that life could not continue long under the present conditions. Another medical man saw the case previously to my visit, and, I presume, deemed it hopeless. There was no possibility of giving medicine by the mouth; aud not liking to trust to the slow absorption of rectal injection, I injected a solution of one-twelfth of a grain of morphine with one one-hundred and twentieth of a grain of atropine under the skin of the arm. In five minutes the convulsions had entirely ceased; the patient was sleeping quietly; the breathing was natural, and the skin was moist and warm. There were no more fits, and the patient was soon well and able to get about again. I may add that I gave the child a vapor-bath while I was preparing the solution for injection.

Nocturnal Incontinence of Urine.—Dr. A. L. Ebermann, of St. Petersburg, in discussing the pathology and treatment of nocturnal incontinence of urine in children, (London Medical Record, New York Medical Record) insists on the necessity of a strict individualization of the cases. He divides the latter into five categories: 1. Incontinence of urine from failure of sphincter; 2. Incontinence from increase of contractile strength of the detrusor; 3. Incontinence from diminution of capacity of the bladder, which diminution results from the patient's adhering to the infantile habit of very often voiding urine; 4. Incontinence from atony or hyperextension of the bladder; 5. Incontinence from irritation of the versical cervix by stones. The first variety of the cases may be recognized on the ground of—a, inability of the patient to retain urine also during daytime; and, b, easy penetration of a bougie à boule into the bladder. The second form may be determined by—a, powerful ejection of water injected into the bladder; and, b, pain felt by the patient when he tries to retain urine in presence of a call for micturition. The third category is diagnosed also by means of injecting water into the bladder; when the capacity of the bladder is diminished, the viscus admits only a certain small quantity of fluid, corresponding to the usual quantity of urine voided by the patient at a time; on injection of a surplus, the fluid flows back more or less rapidly, according to the degree of pressure on the piston of the syringe. Atony of the bladder is easily recognized from the escaping of a large quantity of urine through a catheter introduced immediately after spontaneous micturition. The fifth group of the cases is diagnosed by the sound. As to the treatment, Dr. Ebermann recommends for the first group the administration of nux vomica or strychniue, the ascending douche to the perineum, and, above all, electricity in the shape of faradization, or, in obstinate cases, interrupted galvanization, the cathode being placed at the perineum, the anode at the hypogastrium or sacrum; for the second group, belladonna in in-

creasing doses (beginning with six centigrammes five or six times daily): still better, chloral, and in anemic children solution of perchloride of iron; for the third group, exercise of the patient's control over the bladder, intravesical injection of warm water in gradually increasing quantities; for the fonrth, frequent catheterization, vesical injection of water, and electrization; for the fifth, lithotomy or lithotrity.

Foreign Bodies in the Digestive Canal.—In the Deutsche Medicinal Zeitung the case is related by Dr. Kohn of a melancholic patient with suicidal tendencies, who, in the hope of ending her life, swallowed three large spoons, each seven inches long, and with a bowl about an inch and a half wide. They were all passed from the rectum lying together, the convexity of one bowl fitting into the concavity of the other, and surrounded by a mass of consistent fecal matters. The passage of these bodies had excited a mild peritonitis at first, and later an attack of diarrhea, but these disturbances speedily subsided, and no trouble was experienced after the spoons had been passed from the bowel. This case is almost unique, considering the large size of the spoons and the comparatively sharp edges of their bowls.

Treatment of Hiccough by Compression of the Phrenic and Pneumogastric Nerves.—When we examine the different methods of treatment of hiccough called idiopathic (Bull. Gen. de Therap., Cincinnati Medical News), one is surprised to find scarcely anything else advocated than a number of remedies popular as well as empiric, such as strong compression of the wrist and sudden fright, swallowing a large quantity of cold or acidulated water, compression of the chest or pit of the stomach, etc. It is rather odd that, in the treatment of this spasm of the diaphragm, a therapeutic action upon the nerves which preside over its function or influence it in a reflex manner has been so little sought after—we refer to the phrenic and pneumogastric nerves. It is true that the malady being as a rule benign, the above treatment has usually sufficed. However, T. Schortt, Duchenne, Bouchut, and Tripier each advocate a method in which they had had in view an action on the nerves which appeared to them to be involved. The first three wished to act on the phrenic, A. Tripier on the pneumogastric. The Scotch physician, Thomas Schortt, successfully applied a blister over the phrenic nerve; Bouchut extols the hypodermic injections of morphia in she course of this nerve. Duchenne uses galvanism of the phrenic; the continued current is used by A. Tripier, who advises its application, "the positive pole to the epigastrium, the negative to the front of the neck, in the line of the pneumogastric."

It will be noticed that, whatever the theoretic idea may be that has influenced the choice of one or the other of these nerves, the therapeutic application always involves both. The reason for this is the anatomy of the parts. After referring to the anatomical relations of the two nerves in the neck and to the diffusible nature of electricity applied to the surface, the writer goes on to say: But in a malady usually so mild, and which as a rule lasts but a few minutes or hours, when it is not symptomatic of a serious disease, such as peritonitis, intestinal obstruction by internal strangulation, etc., such a condition, I repeat, where hiccough is styled idiopathic, the treatment employed ought to be as simple and easy as possible. It is true that if one can consider as simple the use of electricity, blisters and hypodermics, one ought to observe that they have been only resorted to where empirical means have failed. We must find, then, a means at once easy of application and effective; such is the treatment of hiccough by digital compression.

It requires no instrument; it is readily applied even by the patient. We have seen just now that four or five centimeters of the inferior clavicular portion of the sterno-cleido-omastoid muscle lie directly over the two nerves. This is the part we select, guided by the pulsations of the carotid. The thumb and index finger are used on either side, symme-

trically applying pressure sufficiently strong to cause the spasm to disappear. One or two minutes, as a rule, sometimes less, are sufficient; meanwhile the patient's head must be kept immovable. In our method, as in those that we have cited, the therapeutic action affects equally both nerves.

It follows that if the hiccough arises from the stomach, the pressure which effaces or diminishes the reflex action of the pneumogastric will stop the spasm during the time it is reflexly excited, and often even afterward. If, on the other hand, the cause arises directly from the influence of the phrenic, the calmative action of compression is equally manifested. Whatever may be the pathogeny of hiccough and the therapeutic mode of action of the digital compression, the result is neverless remarkable. We have rarely seen this method fail in idiopathic hiccough. Once, however, in a young hysterical girl, who had suffered from hiccough for two days, compression, far from calming the spasms, each time it was applied rendered them on the contrary more frequent. In hiccough symptomatic of a severe general disease we have never successfully used compression. We would in no wise discourage experiments in this line, having only used this method five years.

The Dangers of the Cocaine Habit.—The daily papers in the last week contained a horrible account of the ruin of a Chicago physician by the abuse of cocaine. The Review has contributed considerably to the literature of the subject, as may be seen from the following, written by the New York Medical Record: "It is asserted by the Medical and Surgical Reporter that for a long time while Peru was a Spanish colony the cultivation of cocoa was prohibited on account of the disastrous effects which the indulgence in it brought upon the inhabitants. We have already, since the introduction of cocaine, learned what these disastrous effects are which the systematic use of that drug induces.

And it is quite time to sound a note of warning, positive and decided, to the medical profession, regarding the administration of cocaine internally.

To some persons nothing is more fascinating than indulgence in cocaine. It relieves the sense of exhaustion, dispels mental depression, and produces a delicious sense of exhileration and well-being. The after-effects are at first slight, almost imperceptible, but continual indulgence finally creates a craving which must be satisfied; the individual then becomes nervous, tremulous, sleepless, without appetite, and he is at last reduced to a condition of pitiable neurasthenia.

Some physicians have already fallen victims to the cocaine habit, and quite a number have observed the pernicious effects of this habit upon their patients. Dr. A. B. Shaw, of St. Louis, in the Weekly Medical Review, relates experiences showing the effects of the substitution of the cocaine habit for that of morphine, and the evil influence of the continued use of cocaine upon the mind.

Dr. J. K. Bauduy, of St. Louis, has testified to the same effect.

Dr. Louis Bauer, of St. Louis, at the last meeting of the Mississippi Valley Medical Society, described the effect of cocaine on an inebriate. The alcohol habit was destroyed, but a cocaine habit substituted.

The patient, says Dr. Bauer, would take ten grains at one injection. The action of the cocaine ensued in from fifteen to twenty-five seconds, arriving at its height in less than an hour; in two hours the effects were almost entirely gone, and reaction gradually followed. The drug had a very decided and marked effect upon the heart, the pulse rising quickly from its normal standard to one hundred and thirty beats per minute. The cocaine destroyed appetite; it also produced obstinate constipation, lasting many days and hard to overcome. The secretion of urine ceased for the time, and the sexual function was also suspended.

Dr. Bauer thinks that the cocaine habit is at least preferable to the alcohol habit. We believe that it will probably kill more quickly, if that is an advantage.

That cocaine, though often well tolerated, is sometimes poisonous in not very large

doses, appears evident from a case reported in the Chicago Medical Journal, by Dr. G. W. Kennicott. A young woman, twenty-five years of age, of good constitution, snuffed up about three grains of muriate of cocaine into her nostrils. In fifteen or twenty minutes she became dizzy, her vision became dark, a sinking sensation occurred, with great weakness. When the doctor was called he found the patient in a semi-comatose condition, from which she was easily aroused, and when so aroused her mind was clear. Her temperature was above normal. Her skin was hot and dry. The radial pulse was very rapid, and so weak as to be scarcely discernible. Her pupils were widely dilated. Deglutition and articulation were difficult. There was some dyspnea. She complained of dryness of her fauces and a bitter taste in her mouth. She complained also of cold shivers, and her teeth chattered, although her temperature was still above normal. Later she became drowsy; her eyes were closed and the muscles of her face affected. There was great weakness; she could not support her head. There was dyspnea, but it was not severe. There was some nausea, but she did not vomit. She recovered in about three hours under stimulants (brandy and ammonia) and digitalis.

Dr. Merrimann writes to the Ohio Medical Journal that he has lately seen a gentleman who had been taking cocaine for four months for sick headache, beginning with a drachm of the four per cent solution hypodermically per diem, and gradually increasing this till at last he was found to be taking from five to seven drachms a day. He was very weak, with a pulse of 100, and his mind was wandering somewhat, as in delirium tremens.

CONTRIBUTION.

HISTORY OF PISTOL SHOT WOUND, WITH SUBSEQUENT POST MORTEM.

BY N. M. BASKETT, M. D., MOBERLY, MO.

Read before the Mississippi Valley Medical Society.

About noon on the — day of August, 1883, the people of the southwestern part of the city of Moberly were startled by a pistol shot, followed by the screams of a woman, and immediately after by two more shots in rapid succession. Those who witnessed the trouble heard the first shot, and saw a fine looking mulatto woman rush from a small cabin, followed by a ferocious negro man, with a revolver in his hand. Turning round, with clasped hands, she prayed: "Oh, Will, don't shoot! Please don't shoot!" Unheeding the prayer, he fired again, and then, marching up within a few feet of his victim, fired point blank at her face, and she fell to the ground.

By this time men began to gather, and the murderer seeing his avenues of escape shut off, threw his pistol to the ground and fled. He was captured after a short pursuit.

The pistol was picked up, and proved to be a Manhattan, rim fire, single action five-shooter. Its caliber was 32.

The usual confusion which follows an act of this kind existed, particularly as it occurred in a neighborhood where the people of that excitable race, the negro, were abundant. Messengers were sent in several directions for medical aid, one of whom came for me. In the meantime the woman was conveyed into the hut and placed upon a lounge.

Upon my arrival I found I had been preceded by Doctors R—— and H——. Dr. H—— was probing a wound which began inside the mouth, about the junction of the ramus of the inferior maxillary bone with the body of the bone, and extended slightly inward and markedly downward, barely missing the tongue, piercing the pillars of the fauces near the right tonsil and losing itself in the muscles of the neck. The probe passed inward and downward, and indicated a course which would have brought the ball to the surface on the back at a point midway on a straight line drawn from the spinous process of the first dorsal vertebra to the middle of the spine of the scapula. But the probe did not pass more than half the distance from the ramus of the jaw to the point indicated, and as the bullet could not be felt it was evident its course must have changed.

At the point of the left shoulder was another wound, extending upwards and inwards directly toward the line which the other wound would have made had the course of the bullet continued, and it was discussed whether this might not be the point of exit of the bullet which had entered at the ramus of the jaw. But here the statement of the woman herself aided us. She was positive the wound in the left shoulder was made first and by the first shot which her husband had fired, when she ran from the house. The wound in the mouth was made when the last shot was fired. The second shot had missed her entirely. Besides, when we considered that it would be necessary for the bullet which entered her mouth to have changed its course so as to pass directly through the spinal column, about the junction of the last cervical and first dorsal, we were satisfied the

wounds were separate and distinct. Because, if such a thing were possible with a pistol of that calibre the result would have been instant death.

There was but little hemorrhage from either wound and the woman suffered but little from shock. Probing the wound of the left shoulder, iudicated that the bullet was probably located near the left of the spinous process of the first dorsal vertebra and this wound was not considered dangerous.

We had next to decide concerning the wound in the mouth. This had evidently been made while the mouth was open, as there was no external wound. We had then, a wound covered with the masseter and other facial muscles in the first part of its course aud the ramus and body of the inferior maxillary. In the second part of its course the fascia, muscles and vessels of the infra maxillary space. And thirdly, in the neck where the course of the bullet was lost it was covered by the integument, fascia, sterno-cleido-mastoid, and omo-hyoid muscles and in close relation to the important blood vessels and nerves of that region. Here was a very grave injury, and while my brethren were inclined to encourage the sufferer, I felt confident from the nature of the wound, that the woman must certainly die and that either from pyemia or hemorrhage.

After cleansing the wounds, opiates were administered and the woman left in charge of Dr. R——.

For the first few days the woman did remarkably well—so Dr. R—— informed me. Fever, not excessive, manifested itself, and continued to the time of death. Suppuration ensued and the wound discharged greatly, and was syringed once or twice a day with aseptic water. The patient's appetite continued good although she swallowed with difficulty. Quinine was given to reduce fever, opiates to relieve pain. The bowels regulated with laxatives and purgatives, and the patient's condition was considered fairly good up to the day of her death.

About dark on the evening of the seventh day after the wound was received, Dr. R—— was sent for in haste to see his patient. Hemorrhage had set in and when he reached the bedside he found her losing blood rapidly. After using various astringents, styptics and coagulants, he succeeded in checking the hemorrhage. The woman had lost considerable blood and was much prostrated.

He remained with her for nearly an hour and then returned home. He had barely reached his residence, when a messenger arrived, stating that the hemorrhage had come on worse than ever. He immediately returned, but his efforts were unavailing. In five minutes she expired.

I was coroner of Randolph County at that time and acting in my official capacity proceeded to investigate the causes which led to the killing and also to hold a post mortem. Examination of witnesses revealed the fact that the woman was the wife of the man who shot her. That on account of ill-treatment she had fled from him at Boonville, Missouri, and had come to Moberly. He discovered her whereabouts and followed her. That on the morning of the killing he had called to see her and persuaded her to return to him. This she had refused and the shooting ensued.

In the post mortem the skin over the neck was dissected back, and the muscles dissected, one by one, until the course of the wound was reached. The muscles of the neck along the course of the wound were in an inflamed and almost gangrenous condition. The secretion of pus was enormous and it was of a very unhealthy character. Dark bloody clots of decomposed blood existed along the course of the wound in close proximity to the blood vessels, which appeared to be inflamed. It seemed that hemorrhage had occurred from the facial artery close to its origin with the carotid. The bullet which produced this wound was found resting on the first rib close to its junction with the vertebra.

But even had this woman escaped death from hemorrhage, death would certainly have ensued from pyemia. The secretion of pus was enormous, notwithstanding much had escaped from the orifice of the wound, pus had burrowed anteriorly beneath the pectoralis major and minor and posteriorly beneath the scapula and supra-scapularis muscle, and had extended half way down the spinal column beneath the superficial muscles of the back. Death must certainly have followed such a condition; and much suffering was certainly averted by the fact that death came rapidly as the result of hemorrhage.

The bullet which entered at the point of the left shoulder was found lying close to the spinous process of the first dorsal vertebra as we had anticipated.

It may interest the association to know that the murderer plead guilty to the crime and was condemned to seventy-five years imprisonment in the State prison.

The remarkable features of this case were: 1. The location of the principal wound. 2. The absence of marked shock. 3. The inflamed condition of the great blood vessels of the neck revealed by post mortem. 4. The

extensive infiltration of the muscular tissues with pus, and the want of any symptoms of pyemia up to the time of death.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, November 28, 1885, the President, Dr. Atwood in the chair.

STENOSIS OF LARYNX.—PRESENTATION OF PATIENT.

DR. PREWITT performed tracheotomy on the patient about three years ago. Before the trachea was opened he had ceased to breathe. Artificial respiration proved unsatisfactory and there appeared no sufficient reason for this. The tube was taken out and whilst examining the trachea a cast of it, extending to the bifurcation, was thrown out. He has never been able to remove the tube; the patient cannot breathe with the opening closed. The speaker thought that a part of the membrane above had remained, became organized and closed the opening. Looking upwards in the trachea it looked like an inclined plane with no perceptible opening above. He has repeatedly attempted to remedy the condition, with no success, using plugs and tubes from below. Lately, he has attempted to correct the trouble by catheterization of the larynx and thinks that some good has been accomplished. After an operation of this kind he can speak better and can breathe a short time with the opening closed. We are often cautioned, in passing a probe, tube, etc., into the esophagus, of the danger of passing it into the larynx. The speaker's experience in this case goes to demonstrate that the opposite is more likely to be the case. (Dr. Prewitt then proceeded to pass a flexible bougie through the rima glottidis of the patient).

DR. GREEN inquired of Dr. Prewitt if he had examined the case with a laryngoscope.

DR. PREWITT answered, No.

DR. GREEN stated that in some cases the epiglottis was nearly horizontal and in such it was easy to pass a bougie into the esophagus; but in others, where it was almost vertical a bougie might be introduced into the larynx by mistake.

DR. POLLAK recalled the fact that a few years ago a Roumanian who had a similar trouble was shown to the society. He had a different contrivance to keep his larynx open, although not so ingenious a one as Dr. Prewitt had shown. Dr. Billroth had operated upon the man, whose throat and larynx had been cut by robbers.

FIBROID OF UTERUS.—AMYLOID KIDNEY.—HEPATIC ABSCESS.—SPECIMENS.

DR. DEAN stated that Nov. 25th a woman, aged 43, was admitted to the City Hospital who had retention of urine. The bladder reached to the xiphoid cartalage and her abdomen was as large as it is at six months pregnancy. Urine was drippling away constantly. A protrusion would also be felt between the labia. A large vessel full of urine was drawn off and pressure of the abdomen beneath the pubes forced out a large stream, the wall of the abdomen remaining depressed. The woman was very weak and declared that she was not pregnant. The finger could be easily swept around the tumor which protruded. The woman continually grew worse and died a few days after her admission. On post-mortem examination, there was no emaciation apparent. The lower border of the omentum was adherent to the fundus of the bladder for three inches. No urine in the abdominal cavity. The omentum was also adherent to the border of the spleen. The ovaries were drawn down, as also the Fallopian tubes. The bladder presented the usual appearance seen in cystitis. Upon opening the uterus a tumor was found, adherent to the fundus and apparently a myo-fibroma, sub-mucous originally. The liver aud kidneys were the subject of amyloid degeneration. The heart, lungs and spleen were normal. In the mesentery a smooth, shining tumor, two inches in diameter, was found. It contained a large quantity of creamy material the result of cheesy necrosis of a mesenteric gland. The ureters were not visibly distended. Two or three cicatrices were found on the surface of the liver, and cutting through revealed the portion involved as red as beef with shining particles (granulation tissue) being probably the result of a formed abscess. Upon close inspection of the specimen he concluded that it was a fibroid accompanied by involution of the uterus.

DR. HULBERT asked if the cause of death was not septicemia.

DR. DEAN said that the patient showed no active symptoms of it. The woman was exhausted but not emaciated. Nor was there uremic poisoning. He did not exactly know the cause.

DR. HULBERT had taken it for granted that where there is necrosis of a tumor as in this case, septicemia came on. He did not look upon the fibroid as submucous, as these have

a long pedicle and are easily formed and do not pull down the walls of the uterus. He thought that it was more probably intra-mural.

Dr. Dean said that it was quite difficult to distinguish between the two. The objection he fonnd to its being intra-mural was that the uterus was of nearly normal size.

Dr. E. A. Chancellor read a paper on

The Causes of Sexual Depravity.—A Remedy.

He introduced his subject by adverting to the fact that much more attention had been paid to the effects than to the causes of sexual depravity. He also spoke of the great ignorance prevalent in regard to sexual matters and the methods by which incomplete or false information was acquired. Allusion was made to nude pictures, obscure literature and other equally reprehensible methods. The parents should instruct their children or, if they are unable, some intelligent friend of the family, in what every child should know as soon as it is able to understand the use of the sexual organs. Parents and nurses are often the cause of premature sexual inclinations, by toying with children and not only thus, but in the case of parents abnormal sexual propensities are transmitted. Often phymosis, irritable bladder, worms in the rectum, or uncleanliness, etc., are chargable with the causation of premature sensuality. Tea parties, doll-baby influences, socials, hops, rinks, theaters, etc., also tend materially to advance the sexual passion in boys and girls. An unconstrained manner between the two sexes at school is another cause. Masturbation may be begun in an infant at its mother's breast, continue through youth to old age even. Not only boys but girls indulge in this practice, and how terrifying is the ignorance of parents in respect to this secret vice. Irritating food, stimulating drinks given to children, hurrying them with laden stomachs and full bladders to feather beds and a warm room give rise to sexual precocity and self-abuse. Servants, indulgence in tobacco and alcoholics, obsceue conversations, foul jokes, the demoralizing tattle of the sewing circle, choir meeting and drawing room, though refined, still bear their full share in the causation of sexual evils. Dress and the desire for it is a prolific and potent factor in the causation of prostitution. When fashion disappears sensuality in vice will also depart. Dancing the waltz with all of its stimulating accompaniments is as daugerous as the companionship of the libertine, at least there is an immediate influence in stimulating the passions. Courting, a la mode, and marriages de convenances have their dangers. Old men frequently break down and their young wives are driven to adultery. Or husbands unable to supply the demands of their wives for dress, etc., see them prostitute themselves for that purpose. Assignation houses are their resorts and not only do they go for the purposes of gain but frequently to satisfy their carnal propensities. Worse yet are the "hells" where jaded, broken down rouès not only revive the oriental custom of pederasty, but also the buccal act, which is rapidly superceding coition. Family physicians frequently advise fornication as a remedy for self-pollution, etc., and often are the cause of a loathsome disease acquired by the victim. The cure for such a state of affairs is to beget children properly in the first place. The mingling together of the sexes should be regulated, and in public and private schools the compulsory education of boys and girls in anatomy, physiology and hygiene. As they advance the hygiene, structure and functions of the sexual organs, thus depriving them of the unsavory fascination and false shame associated with these subjects, which otherwise attends the communication of them.

HOW SMALL-POX HAS BEEN INTRODUCED INTO THE UNITED STATES FROM CANADA.

By Henry B. Baker, M. D.

Secretary State Board of Health of Michigan.

About August 6, 1885 a French-Canadian family, consisting of the mother and six children, passed through Port Huron from Montreal to Marinette, Wisconsin. They met with no detention at Port Huron, or at any point through Michigan, Illinois, or Wisconsin, as it was before the present system of inspection was established. From this family resulted eighteen cases of small-pox, with four deaths. The outbreak was promptly suppressed by the health authorities at Marinette.

Another French family, named Picher, left their home near Montreal Sept 22, 1885, were detained at Detroit, "examined, fumigated, and vaccinnated." The family consisted of father, mother, and seven chiidren. They passed Detroit Sept. 23, and reached their destination near Coleman in the township of Peshtigo, Wisconsin, on the night of Sept. 24. About a week after their arrival in Wisconsin, four of the children were taken sick

with small-pox, but it was not discovered until a large number had been exposed. I am informed by J. J. Sherman, M. D., health officer at Marinette, Wis., that "the vaccination at Detroit was complete and effective on three, and greatly modified the effect on the other four."

Dr. Sherman writing Oct. 30, 1885, in regard to these cases, says: "Of course it does the immigrant good to vaccinnate, and no doubt prevents the spread of small-pox altogether in many cases. * * * Only I do think that immigrants from infected districts should be held, when they have not been vaccinnated or had small-pox, until the vaccination gives evidences of working, or until it was morally certain that the disease was not in the incubative stage; and, if possible, notices forwarded to health officers of the towns to which they were going that they might be kept under surveillance until all danger of contagion was passed."

CLINICAL LECTURE.

A CASE OF CROUPOUS PNEUMONIA.

A Clinical Lecture Delivered at Bellevue Hospital.

BY ALFRED L. LOOMIS, M. D.,

Prof. of Pathology and Practical Medicine in the New York University Medical College.

Our patient, gentlemen, is a male, who complained a week ago for the first time of a severe trembling and chill. This attack lasted half an hour. The chill was not so sharp as a "chill fever." He first felt a chilly sensation about the heart, which lasted for two hours. After that he felt hot and feverish, but went to work as a laborer. He has been exposed to the changes of temperature, and was wetted to the skin. Up to the date of the chill he did not feel as well as usual. Prior to this he had a sweat of coldness over night; had pains in the calves of his legs, etc. In the morning he went to work, at which he remained two hours, and then had to quit. The next morning he resumed work, but was again obliged to abandon it. The patient continued ill until last Friday, when he was at his worst. He began to complain of cough, pain in the right side, pains in the bones, stiffness and soreness.

The diagnosis of this case may be pleuro-pneumonia. If the pneumonia reaches the surface of the lung, you will have some pleurisy. Every case in which the pneumonia reaches the surface of the lung may be called a pleuro-pneumonia. This man had pain for two or three days before he got his chill, therefore I suspect that he had pleurisy first and then pneumonia. Many cases of pneumonia come in this way. Patients have pain in the side quite severe for some days, and then they have a chill. If you listen before they have the chill, you will find the physical signs of pleurisy. After they had the chill, you get the physical signs of pneumonia. Those cases in which the chill comes and then in a day or two pain begins are cases of croupous pneumonia—an infiltration of the lung substance with pleuritic exudation on the surface of the lungs. It is the same kind of infiltration nearly that you get in the air-cells—not extensive enough to cause thickening of the pleura nor to cause effusion. The pleuritic membrane is involved because the pulmonary vessels are the seat of inflammation.

The physical signs and the characteristic signs of pneumonia do not come on until after the pleurisy is well established. These are cases of pleuro-pneumonia. There is a great difference between pleuro-pneumonia and the ordinary croupous pneumonia. A pleuro-pneumonia will not behave according to the days of crisis of a pneumonia. Croupous pneumonia is a disease that goes on steadily to its day of crisis and then ends in gradual resolution. In pleuro-pneumunia your crisis day will come later, the resolution will be slower and less complete. Sometimes months will elapse before all the evidences of consolidation will disappear under the inflamed pleura, and more months will elapse before the signs of pleurisy will have disappeared.

It is said that croupous pneumonia is never followed by phthisis. I do not believe it ever is, unless the pleuritic element is the primary and principal factor, when it becomes a pleuro-pneumonia, and then the croupous process may be followed by cheesy degeneration.

Why has this patient pneumonia at all? Acute suppurative pleurisy will be ushered in by great difficulty of respiration, great pain, etc., and by the ushering in of these symptoms. Taking the ordinary characteristics of a pleuro-pneumonia, you will be led to the conclusion that it is a case of pneumonia on account of high fever and chill. In pleurisy you do not have the high fever and chill which we get in pneumonia. Our patient has a flushed face, and his countenance is not characteristic of pneumonia. He has not quite enough of the mahogany hue upon his cheek to make it characteristic of pneumonia, but it is sufficiently flushed to

throw out pleurisy as the only disease. The respiration here is about 30 per minute. This is nearly 10 above the normal respiration. The patient is now in the eighth day of his disease. The temperature yesterday was 100; now it is 99. The pulse is full and depressed, and he is bathed in perspiration. His tongue is covered over with a white coating, a little yellowish. He is not in a typhoid condition. He did not spit blood until a few days ago, and then the blood was mingled with sputa which is very tenacious and of a whitish yellowish color. This is the sputum of bronchitis. There is dullness on the right side in the inter-clavicular region as compared with the left. Vocal fremitus is most marked on the right side. He did not receive an antipyretic dose last evening, and the fall in the temperature does not depend upon the fact that the patient took quinine. On the sixth day the temperature falls in pneumonia. His pulse is not over 100, temperature 99 and respiration 30, and the fact that his disease has behaved in this way is against its being pleuro-pneumonia. At the junction of the scapula below sub-crepitant râles are heard and bronchial respiration. If the pleurisy were a prominent part of the disease, the vocal fremitus would be decreased. It is, however, very markedly increased on the right side. Even though there was a consolidation of the lungs, there would be diminished vocal fremitus and not increased if this were a pleuro-pneumonia or a pleurisy.

This, gentlemen, is a case then of croupous pneumonia in which there is some pleurisy, which gives a large amount of plastic exudation, and which in all probability would give some fluid in the pleural cavity.

The prognosis is good.

Treatment. Let him alone. The stage of resolution has come. If you had seen him when the temperature was 104°, you would give him nourishment and rest. This is a self-limited disease. Do not interfere with the man until you get some indications for interfering. If the temperature does not go over 105°, let him alone, and in a week or ten days the patient will be convalescent.

—We are indebted to Dr. F. S. Newcomer of Indianapolis, for the paper, "Case of Lithotomy of the Gallbladder," by Dr. J. S. Bobbs, deceased. The paper is difficult of access, and from the remarkable features of the case, worthy of republication.

SELECTION.

ON INTRAPULMONARY INJECTIONS.

Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Cardiff.

BY R. SHINGLETON SMITH, M.D., F.R.C.P., B. SC.

Physician tc the Royal Infirmary.

(From the British Medica Journal.)

The literature of phthisis, its etiology and its treatment, bids fair to become voluminous. Much good work has been done, and much written, since the discovery by Professor Koch of the tubercular bacillus; but no such results as regards the treatment of the disease are yet forthcoming as might be expected to arise from so important a discovery.

At the meeting of the International Congress in Copenhagen in 1884, it was asserted by Dr. Jaccoud, in elegant and forcible language, that the discovery of the bacillus has been absolutely sterile in its effects upon the treatment of phthisis, and that the discovery was of no value in a therapeutic sense. But, although no startling results have yet been arrived at, much work of a tentative character has been accomplished. Jaccounds work on The Curability and Treatment of Pulmonary Phthisis, and that of Germain See on Baccillary Phthisis, are likely to encourage a more hopeful tone, and to lead to further investigation for improved treatment. However unsatisfactory treatment may be among our out-patients, to the more fortunate patients who can afford to carry out the details of climatic, dietetic, and medicinal methods, such as are inculcated by the latest authorities, the prospect of cure is by no means discouraging. The use of an improved dietary, perhaps the practice of superalimentation, advocated by Weir Mitchell in cases of neurasthenia (and applied by Debove to cases of phthisis), the administration of milk and of cod-liver oil in larger doses than are usually employed, the use of antiseptic inhalations, and of various forms of antiseptic medication, may be expected to give more satisfactory results than have as yet been obtained.

One method—treatment by iodoform—has not yet received the measure of attention which the results of some who have tried it appear to justify. It may be said that all these methods are unsatisfactory, and that, in the majority of cases, the disease progresses in spite of all; or, if arrested, it is only for a time, when it starts again on a new career of

progress. All must admit that this is too often the case, and hence the necessity for further inquiry as to the possibilities of a more active antiseptic medicinal treatment, or methods of inhalation or injection which have not yet been fully worked out in detail.

Injections into the lung, or into intrathoracie cavities, have frequently been performed; the history of the practice has been well described in an interesting and suggestive paper by Dr. Beverly Kobinson of New York, in the New York Medical Record for January 10th, 1885. He there alludes to the exhaustive work on this subject by Professor Pepper, of Pennsylvania, who, as far back as 1867, was lead, by the recognition of the importance which a low grade of inflammation had in the development and progress of certain phthisical conditions, to consider the best means of modifying it. Reasoning by analogy with what is known to be true of inflammatory lesions in external tissues, he ultimately concluded that the injection of the afflicted pulmonary structures, by means of a small cannulated needle, pushed through the intercostal space, and charged with some suitable mortifying fluid, offered the best guarantee of successful results.

Attention was further drawn to the subject by Dr. Wilhelm Koch and by Mosler. An analysis of what has been done in the surgical treatment of lung-cavities has been given by Wunderlich, of Brooklyn, in the New York Medical Journal of January 10th, 1885; but Pepper's proceeding, advocated by Robinson, is of a different character from that of Koch, Mosler, and others, who introduce a cannula into a cavity in the lung, and then periodically disinfect the cavity by washing it out with various detergent fluids. The method adopted by Pepper was follows- A small steel cannulated needle, three inches long, attached to a syringe containing twenty-five minims was employed. Dilute solutions of liquor iodinii compositus, at first in the proportion of one part to fifteen, later of one part in five were used. The quantity of fluid injected varied from four to twenty-five minims, and the injections were made once a week.

In this way 291 injections were made in seventeen distinct cases, and the results were considered to be satisfactory. It was thought that,"in diffuse consolidation of a large portion one lung, such intrapulmonary injectious are of no value, but whenever the consolidation is limited to one apex, and yet shows no tendencf to disappear under the usual methods of treatment, but rather to become extensive, intrapulmonary injection should be carefully tried."

Frankel made injections of various substances; carbolic acid (1 to five per cent); watery solution of boracic acid 4 per cent; iodoform in olive oil, 5 per cent, and 2 to five per cent solutions of acetate of albumina (London Medical Record, July 15th, 1882.

Beverley Robinson's cases, twenty-nine injections in eighteen patients, corroborate Pepper's testimony that intrapulmonary injections in phthisis, when properly made are not dangerous. "They also show that in many cases we may fairly hope that they will relieve symptoms. Among those which have been sensibly ameliorated are cough, dyspnœa, the quantity and character of the sputa. Still, there are probably certain cases in which no relief will be obtained. Further injections may occasion slight accidents, none of them grave fortunately. These are alight hæmoptysis, syncope, choking sensations in the throat, localised pain, limited pleuritis, emphysema, rise of temperature. Some of these last but a few days, and afterwards disappear entirely; others are mere temporary occurrences, only last a very short time, and do not return."

My own experience of injections into the lung-substance has been limited to one substance, iodoform, which was selected for the following reasons. Its high germicide value, and its non-irritating qualities when injected subcutaneously, gives it superior advantages over many other antiseptic subtsances; further, the demonstration of the utility of the drug, when given medicinally, established by Dreschfeld and others, has been abundantly confirmed in my own experience. In a series of cases, published in the Transactions of the International Congress of 1884, it was found that 29 of the 46 cases showed an absoulte gain in body-weight, amounting in one case to 31 lbs. in 99 days; in another case, to 33 lbs. in 110 days; of the remaining 17 cases, the loss of weight was small, and in many of them, the wasting, which had previously been rapid, was more or less completely arrested.

It might fairly be expected that, if the drug could be brought into contact with the principal focus of the disease, and in a more concentrated form than when diffused throughout the blood, more decided results might arise from its use. Observations on the germicide value of iodine have been made by Sternberg (American Journal of Medical Sciences, April 1883,) who finds that the quantity of iodine required to prevent the development of test-organisms is 1 part in 4,000. The quantity of iodine required to prevent the development of the septic micrscoccus in the blood of an adult man weighing 160 pounds, would be

thirty-five grains. Now, I have in one case administered six-grain doses of iodoform five times daily, and no toxic symptoms were witnessed until after one month's continuous administration of thirty grains daily. Inasmuch as iodoform contains 96 per eent. of nacent iodine, so loosely combined that it is set free within the body, it follows that iodine in this form may be introduced within the body in quantity almost equal to the amount shown by Sternberg to be necessary for the disinfection of the whole mass of circulating blood. Probably the limit of administration in most subjects will be much below this quantity; but I have frequently given twenty-five grains daily without produciug any toxic or deleterious results. Whether it be possible to introduce medicinally, by the usual methods, such quantity of iodine as will prevent the germination and growth of the tubercle-bacillus throughout the body, may still be considered sub judice. This limit is clearly not far beyond our reach, with the means now at our disposal; but, although this consummation may be possible in some cases, individual idiosyncracy will frequently prevent its attainment. ment; and in most cases it will be undesirable, if local treatment can be made to accomplish the end in view.

Treatment by injection into the lung-tissue appears to be an easily performed, safe, and theoretically useful method by which local developments of tubercle may be reached by local treatment, and so the risk of toxic effects of iodoform, when introduced into the blood in quantity, may be avoided. It remains to be proved whether actual experience will justify the expectations which theoretical considerations afford.

Since my attention was first directed to the subject, I have met with only five cases in which I have thought it necessary to carry out the practice of injection into the lung of an iodoferm-solution. The results have not been great; but, such as they are, I now report them.

The first case was one of gangrene of the lung, occurring in a man aged 44, who had suffered from exposure, want of food, and intemperate habits. The patient was very prostate, with marked hectic, and profuse fetid expectoration, with evidences of consolidation and excavation in the lower lobe of the left lung. As antiseptic inhalations, and the administration of iodoform in pill, two grains every four hours, failed to diminish the excessive fetor of the breath and the sputum, it was thought that this was a case in which local treatment by iodoform-injection was more than justifiable. Accordingly, a solution of iodoform in olive-oil was injected into the substance of the lung in the centre of the area of dulnes in the left base; fifteen minims, containing one grain and a half of iodoform, were injected with the ordinary hypodermic syringe. The injection had no immediate effect on the patient, it did not give rise to cough, and there was no evidence of pain or any other discomfort. A similar injection was repeated daily for four successive days; no cough, no hemoptysis, no pain, were observed as a result of the injections; but on one occasion, the patient stated that he noticed the taste of the iodoform in his mouth for some hours. Afterwards an ethereal solution of two grains in ten minims was used, instead of the oily solution; slight cough ensued immediately after the first use of the ethereal fluid, but, on subsequent occasions, the patient made no complaint, and did not appear to have any discomfort. On one occasion, a few streaks of blood were expectorated. For thirteen successive days, the ethereal solution was injected into various parts of the left lower lobe, and with apparent benefit; the temperature fell to normal, expectoration diminished in quantity to about one-half, and was less offensive, and there was less cough. The improvement was not long maintained; in consequence of increasing weakness, the injections were discontinued, and on the second day after, it was observed that the fetor of the breath had much increased, the dyspnœa and prostration increased, and death took place four weeks after his first admission to hospital. After death, a gangrenous cavity, with much surrounding grey hepatisation, was found in the left lower lobe; the cavity did not contain either fluid or slough, and no traces of the injected iodoform could be seen either within or around it.

The next case was one of chronic pneumonia. William S. D., aged 40, of good family history, but of intemperate habits, came under observation in December, 1884, and gave an account of failing health since January. There had been two attacks of blood-spitting, and profuse expectoration, amounting to half a pint or more, of pure pus daily, which did not contain tubercle-bacilli or lung-tissue. There was flattening at the right apex, and contraction at the right base; the left supraspinous fossa was dull on percussion, and there was coarse bubbling crepitation at both bases. Liver-dulness was normal. There was no albumen. The pulse was 96, small and weak. On January, 23rd, 1885, a large patch of dulness, and cavernous sounds, were found at the base of the right

lung; there was also coarse crepitation over the left lower lobe. Sputum amounted to one pint daily, pure pus, wiih no tubercle-bacili. The cavity in the right lowor lobe was aspirated by Mr. Gregg Smith, and on January 25to a drainage-tube was introduced, but without giving exit to more than a few drops of pus, although air passed in and out freely. The tube was removed after four days, and the wound closed at once.

February 4th. An ethereal solution of iodoform (two grains in ten minims) was injected into the position of the cavity in the base of the right lung; the injection immediately set up violent coughing, and the patient tasted the ether, but the sputum did not become blood-tinged.

February 19th. Two grains of iodoform in ten midims of ether had been injected on five occasions in fifteen days. The taste of the ether had been mentioned, but little cough was usually excited; on two occasions there had been momentary faintness immediately after the injection. The sputum had diminished to half a pint, and the injections had given rise to no toxic symptoms. The patient felt better, and went away io the seaside; the injections were accordingly discontinued.

They did not, however, effect any permanent improvement; the patient was of opinion that they diminished the expectoration, but this was only for a time; the process of disintegration of lung-texture steadily progressed, and ultimately involved nearly the whole of the right lower lobe; at the same time the condensation in the left lower lobe steadily progressed, and ultimately there were evidences of cavities on both sides, cavernous sounds and coarse gurgling with pectorilquy being being audible from below the spine of the scapula, on the right side, and the angle of the scapula on the left side, downwards to the base of the lung. The sputum was examined on numerous occasions, but neither tubercle-bacilli nor shreds of lung-tissue could be discovered.

The patient died in June, whilst away from home, and I did not learn the details of his later history.

The third case was one of chronic tubercular pleuritis in a woman, aged 22, with a history of three month's cough, wasting, and vomiting. There was much dulness at the right base, from the fifth dorsal vertebra downwards, also at the right supraspinous and infraclavicular regions, and the sputum was found to be crowded with tuberclebacilli. Nine injections of ether solution, one grain in five minims oh the first day, two grains in ten minims subsequently, were injected into the dull area at the base, on nine successive days. The injectious gave rise to no pain or cough, and there was no hemoptysis; on one occasion, the patient remarked that she could smell something unusual immediately after the injection.

There was steady gain in weight, from 114 pounds to 140, in two months; the temperature became normal; cough and expectoraiion ceased; the dulness of the right lung had much diminished, and the patient considered herself to be quite well.

The fourth case wat once of advanced phthisis, in a woman, aged 25, with a tuberculous history, and symptoms of twelve months' duration. On admission there was considerable anemia, edema of legs, and albuminuria to the amount of one-fourth. Hepatic and splenic dulness were in excess. There was much dulness and loose crepitation at the left apex, both front and back. Temperature was subnormal. There was little expectoration, but su&cient t0 show the presence of tubercle-bacilli. Injections were made into the left upyer lobe, at the infraclavicular and and superior axillary regions, on six occasions, in nine days; two grains of iodoform in ten minims of ether were introduced on each occasion, and pid not give rise to cough, nor did the patient taste the ether; there was no hemoptysis, bnt there was complaint of pain round the left chest after the later injections. There was no change in the physical signs, and tee patient's weight remained stationery. She did not think it necessary to remain longer under treatment.

The fifth case was one of chronic phthisis, which had been under trdatment for eighteen months as an out patient, from December, 1883, to July 1885, and had taken iodoform in pill, or dissolved in cod-liver oil, during nearly the whole of this period; the weight had increased from 8 st. 2 lbs. in December, 1883, to 8 st. 9 lbs. in September, 1884; after which time it remained stationary till May, 1885, when he bngan te lose weight, partly in consequence of a sore throat, which gave rise to some dysphonia, but which did not cause any laryngeel ulceration. Five ihjections were made from July 12th to 22d; the fluid was injected into the consolidated upper lobe of the left lung, at the supraclavicular, infraclavicular, and superior axillary regions. The first injection of ten minims of the ethereal solution gave rise to cough, with momentary faintness and pallor; the following injections were limitad to five minims, but some pain and a localized pleuritic friction were observed after the third. The fifth was followed

by neuralgic pain in the shoulder and up the neck. The temperature continued to be subnormal, and the weight stationary.

In all, the injections have been given forty-two times in five cases. The ethereal solution of iodoform has been used excepting in the first four injections, when the drug was dissolved in olive-oil; the ether readily dissolves one grain in five minims, but wiil not take up more than this; accordingly, the quantity of iodoform capable of being injected is limited by the anesthetic effect of the ether. I have been unwilling to use any substance for injection; the bichloride of mercury, although a far more powerful germicide; is so irritating when injected simultaneously, that its use is not likely to be devoid of danger if injected into the lung texture.

It is of interest to notice that injections of ether-iodoform have more recently been made by Professor Verneuil (Revue de Chirurgie, May, 1885) in the treatment of cold abscesses; he injects 100 grammes of iodoform in a large purulent cavity. If this treatment should prove to be effectual, it will afford strong corroborative evidence of the efficacy of injection of smaller quantities of the solution into localized gatches of lung-tissue, and will further be a valuable means of preventing the dissemination of tvberele-bacilli throughout the body, as has been so commonly she case when acute disseminated tuberculssis has been the final result of a localised tubercular abscess.

The general result of my experience of these injections may be summarized as follows:

1. No harm has arisen in any one case; there has been no hemoptysis, no evidence of pneumonia or general pleuritis set up by the injections; no evidence of any irritation or damage to the lung texture, or to the cellular tissue at the seat of puncture. The ether has given rise to a feeling of faintness and giddiness; but these have been only of momentary duration, and have left no ill effects afterwards. Cough has frequently been present during the injection, but has ceased almost immediately. Pain around the side has been present in one case; and in another, pain has been felt extending down from the shoulder, along the arm, in attempting to inject above the scapula behind. Pleuritic pain and friction have been present in two cases; but of a very evanescent character, and not accompanied by any rise of temperature.

2. The positive results have been as followsj In case 1, of lung gangrene, there was diminution of the fetor, and general alleviation of the symptoms. In case II, of chronic pleuropneumonia, with basic cavities there was diminution of expectoration, and some improvement in general condition. In Case III, of chronic tubercular pleurisy, there was very marked improvement under treatment. In Case IV, there was some little improvement whilst under treatment, but nothing definite as a result of the injections. In Case V, no definite result has yet been observed. Case III was the only one in which improvement could reasonably be expected; in the other cases, the treatment was adopted with no great expectations as to the result.

These cases do not, therefore, go far to establish the utility of intra-pulmonary injections in phthisis and other diseases of the lungs; but they do show that the practice may be looked upon as a safe one, and that it is likely to be of benefit in suitable cases.

I have been unwilling to adopt this method in cases where steady improvement has been induced by other methods of treatment; and, further, when the lungs have been in a hopeless state of excavation, I have also not cared to carry out a practice which could only be looked upon as a useless interference; hence the number of cases so treated has been of necessity small; but the results have been encouraging, and I have little doubt that intra-pulmonary injection will become a familiar, an efficient, and a useful addition to our methods of treatment of chronic diseases of the lungs.

CORRESPONDENCE.

St. Louis, December 2, 1885.

Editor Review: I feel constrained to express my thanks to you for republishing the article of Dr. Bobbs on Lithotomy of the Gallbladder in your last issue. It is a part of the literature on the surgery of the gall system which has been buried in an obscure periodical and seems to have been so little thought of in its own home, that it is now entirely lost.

I have received letters of inquiry about the Bobb's case from several European and one American surgeon and in consequence have repeatedly offered $10 for a copy of the Indiana State Medical Society Transactions of 1868 at Evansville and at Indianapolis. without being able to secure a copy.

By publishing the copy received through the kindness of Dr. Newcomer you have done a great service to all surgeons interested in this branch of abdomiaal surgery.

From my study of the case I must conclude that Dr. Bobbs did not open the gallbladder

itself, but that he removed some biliary calculi which had perforated the gallbladder and had become encysted by a circumscribed peritonitis in a separate sac attached to the gallbladder situated somewhat below it.

Finally I desire to state in this connection that the case of Courvoisier which I enumerated in my paper on Ideal Cholecystotomy as successful, proves to have ended fatally some weeks later. I may be permitted to call attention to the fact here, that my case now stands alone as the only successful case of cholecystotomy witout forming an abdominal fistula. It gives me pleasure to have contributed my mite towards placing American surgery once more in the van in this new field of surgery.

Respectfully yours,
A. C. Bernays, M. D.

ITEMS.

—Dr. George F. Hilton, of St. Augustine, Ill., writes us a brief note stating "that, according to his observations, he considers diphtheria purely and decidedly a local disease, and not necessarily transmitted from one to another."

—We have received from Parke Davis & Co., a circular descriptive of a materia medica collection for students. The case contains specimens of all crude drugs of vegetable origin recognized in the United States pharmacopœia and many others in common use—in all 288 specimens. The price is fixed at ten dollars.

—As a substitute for sponges in hospitals, Cornell and Shelton, of Birmingham, Conn., offer Japanese paper towels at $5.50 per thousand.

—Diaphoretic bolus.—The following formula is to be made up into four doses to be taken during 24 hours:

Flowers of sulphur,	-	2 grms.
Bitartrate of potash,	-	2 "
Powdered guiac,	- -	1 "
Simple syrup,	- -	q. 5.

—(L'Union Médicale.)

—Fetor of sweating feet, etc., may be remedied according to L'Union Médicale, by thoroughly rubbing over the skin 20-30 grams of subnitrate of bismuth for about sixteen cousecutive days.

—Pomade for Eczema.—Lucas Championniere recommends:

Powdered boraid,	-	6.0 grm.
Vaseline,	- - -	30.0 "
Balsam of Peru,	- -	0.5 "

The boracic acid is to be rubbed up directly with the vaseline. The salve is recommended for intertrigo, fetid sweats, and the eryhema of infants.

—The Kleptococcus.—We learn with pleasure that Professor Meandra has succeeded in isolating the bacillus of kleptomania. It has long been thought that this disease owed its origin to an organism of a snaky, elusive nature, which rendered detection difficult, but it remained for Progessor Meandra to first demonstate its existence. The difficulty was, of course, to obtain pure cultivations. At length Professor Meandra secured a magpie of well-known thievish propensities, and removing a small portion of its brain, under the spray, he began the first of his long series of experiments. The organism can be readily grown in beet-juice (prepared by beating beets and straining) or in cabbage-infusion. It stains easily of a deep steel color. Under a power of eighty diameters this organism presents a hook-shape thus ?, which gives it the name of Meandra's Interrogative Micrococcus; we would, however, suggest (with due deference to the professor's taste) the name of hookeycoccus, both as more euphonious, and as applicable, no matter what position the organism may assume; it also indicates its character as well as shape. Injected subcutaneously into cats the effects of the hookeycoccus were remarkable. Several of these animals, let loose in a back-yard, were seen two days after to creep surreptitiously into some of the neighboring houses and kleptomize pieces of meat, fish, etc. While we cannot quote the whole of this important article, we relate one interesting event. A quantity of beet-juice, in which a cultivation was far advanced, was spilled on the floor of the laboratory. Three days after the professor missed his pocket-book, watch, and other articles of value; it was also noticed that several houses in the place had been visited and valuables taken. Mr. Lestees, the professor's assistant, a man ot the highest respectability, was also missing. Professor Meandra thinks he must have inhaled some of the dry dust from the spilled cultivation. There was much excitement when the affair leaked out, and, as there are two banks in the town, the people petitioned the mayor to prevent all communication between the professor and the cashiers. There is no doubt that an attenuated cultivation can be obtained, in which case the criminals confined in the prison at Moros will be vaccinated. We agree with this great investigator when he says, "the bacillus opens a wide field for thought—an almost unfathomable vista." "Many generations must pass," he continues, "before the last microbe is stained and mounted, drawn and photographed, and stamped with the name of its discoverer." "The next two hundred years will be known in history as the Microbian Age."—The Birmingham Medical Review.

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CONCERNING LITHOTOMY.

It appears that in Germany, at least, lithotomy is the preferred mode of operation for urinary calculi. At any rate v. Bergmann, and v. Volkmann expressed themselves to this effect at the late Magdeburg meeting of German scientists. They emphatically put themselves upon record as believers in a cutting operation; all methods of crushing, litholapaxy not excluded, they believe are not destined to continue in favor.

On account of this drift of opinion the subject of the most safe and available method of lithotomy has become a favorite theme for discussion at meetings of surgeons in Germany of late. Strange to say, English and American literature has been relatively silent on this point.

It is apparent that lateral lithotomy is about given up. No prominent advocate of it has been forthcoming of late. All interest seems to center on the question of preference of the sectio mediana or sectio alta. Volkman and Maas have championed the former, v. Bergmann, Trendelenburg, Petersen and Langenbeck in Germany, Albert, Guyon and Monod in France the latter mode of operation. These two factions are pronounced in their stand. The champions of the median section claim positively that in the majority of cases the boutonnière, the sectio mediana, answers for the purpose of the removal of even large concretions.

At the Fifty-Eighth Congress of German Scientists and Physicians, held September 21, at Strasburg, Prof. Kraske, of Freiburg, entered a plea for median lithotomy. He admits the advantages claimed for the high cutting operation. He acknowledges that this is the most direct way into the bladder, that hemorrhage can easily be controlled, that the stone can be quickly found and extracted, that incontinence or impotence never ensue. Also that antisepsis can be more completely carried out than in the perineal modes. Also that a laceration of the peritoneum, that was formerly so much feared, can be almost surely avoided; that Braune, Petersen and Fehleisen have shown that a proper distension of the rectum and bladder will force the prevesical reflection of the peritoneum so high that no danger attends a broad and sufficient suprapubic incision of the bladder.

Nevertheless Kraske favors the median section, the simple boutonnière with subsequent bloodless dilatation of the urethra and sphincter. He believes this operation to be most simple, and more free from danger than epicystotomy. He believes that the urethra and sphincter are so dilatable that even large calculi can be extracted by these avenues without permanent functional damage. Should the same prove too large for extraction, then the lithoklast may be employed to fracture it. Or should crushing not be feasible, then a sectio alta can still be performed and that too, without many greater difficulties or greater dangers. On the contrary drainage would be so more perfectly possible. Kraske argues strongly in support of all these points. The splitting of the urethra at the perineum is incomparably more simple than a division of the abdominal parietes and incision of the bladder. The degree to which urethra and sphincter may be dilated without damage is great, and laceration of the mucous membrane uncommon even with large calculi or fragments thereof. Incontinence occurs only in those cases where chronic cystitis of long duration has impaired the muscular walls of the bladder.

Kraske cites two cases that occurred in his own practice in support of his ground. In both cases the stones were large and the manipulations for extraction took quite a long time.

In cases that demand a crushing of the stone sharp fragments may cause laceration and thus infiltration and sepsis become a possible sequence. However the perfect drainage that can be so easily carried out certainly obviates any grave complications from this source.

That a sectio alta can still be made after a perineal section has preceded is shown by successful cases of Billroth and one by v. Volkmann, one by Howe and one by Kraske. The suprabubic operation is, however, as the record of all these cases shows, quite a difficult undertaking under such conditions. The empty bladder contracts after the perineal incision and the prevesical duplicature of the peritoneum comes down below the symphysis. Under these circumstances there is danger of opening the peritoneum or great tearing of the prevesical connective tissne is unavoidable. The majority of such cases terminated fatally. For these reasons Kraske endeavored to solve the problem of avoiding the grave dangers attending suprapubic cystotomy under such circumstances. He found that filling the rectum by injections does not influence the position of the fundus vesicae, consequently of the prevesical fold, when once the perineal opening has been made, and the bladder cannot be distended, as is usually done before making a sectio alta, because the injected fluid at once returns. By experiment upon cadavers Kraske has learned that the desired object can be accomplished by introducing a rubber balloon with attached tubing into the bladder through the perineal slit, and blowing it up with air or by an injection of water. This device Kraske recommends and promises to carry out should an opportunity demand it.

Furthermore, Kraske from his experiences suggests that a sectio alta be first made in such cases where there is well founded doubt that the median opening is alone sufficient for the extraction. And in such cases of sectio alta that show a putrid cystitis Kraske thinks that a sectio mediana ought to be made secondarily for the sake of a perfect drainage, so as to avoid a failure of union of the suture of the bladder or an infiltration and phlegmonous inflammation of the prevesical connective tissue. It fact in such cases, to meet such grave trouble, it would be well not to unite the wound of the belly at all.

His conclusion is that while the sectio alta has a province, that its safe general applicability is limited. The easy, rapid execution and favorable secondary conditions after median incision make it the preferable surgical method, to be departed from only in those instances where the indications speak strictly against the operation. The more concise formulation of the indications appears to Kraske of far greater importance than an endeavor to seek out especial points of excellence of the one method compared with the other.

Another Filth-Disease.—We note in the British Medical Journal:

"At the late meeting of the Clinical Society, Dr. Seaton communicated particulars respecting an outbreak of epidemic illness which he witnessed in a school or orphanage containing about 600 children, near London, during the past summer. The disease occurred in 157 cases; it was confined to the inmates of the school, and did not spread to houses or cottages close by; it began in June, and proved fatal in seven cases. The earlier cases were generally more severe than the later ones; and there were second attacks in at least five instances, in one of which the interval was sixty-six days. No adults, of whom there were about twenty at the establishment, were attacked. The onset of the illness was sudden, without any premonitory symptoms. The first symptoms were rigors and severe frontal headache, followed in a few hours by pyrexia, vomiting (often very severe), without diarrhea, scantiness of urine, and almost complete absence of the chlorides therefrom. The crisis rapidly developed;

fatal cases terminating within twenty-four hours, and in uncomplicated cases defervescence occurring, in two or three days in slight cases, and in four or five days in severe cases, by a sudden fall of temperature, which was generally simultaneous with the appearance of a herpetic eruption on the upper lip, and with perspiration, but no marked sweating. Earache, occasionally followed by otorrhea, was a late symptom of the fever in some cases. There was absence of any other local pains, except those due to the straining of the muscles in vomiting. The illness rarely extended beyond four or five days, unless complicated with pneumonia. The pyrexia was variable, the highest temperature extending from about 101° Fahr. in slight cases to 106° Fahr. in very severe cases, and more than half the cases were of this latter type. The fall of temperature was as sudden as its rise, unless pneumonia supervened. The ear-mischief appeared to be due to extension of inflammation from the naso-pharyngeal passage up the Eustachian tube to the middle ear. In the only fatal case examined post mortem there was pneumonia of the base in each lung, and patches of congestion of the ileum for some four or five feet above the cecum. Dr. Seaton thought the disease was specific, that it was probably not contagious, and that its period of incubation was short. Dr. Bridges further gave some interesting facts respecting the etiology of the affection. He described the school as very unhygienic; the land attached to it was only six acres in extent, and the earth-closet system had been adopted for the last twenty years. All the refuse from the earth-closets had to be distributed over the small area of land available —at most an acre and a half—so that this land was quite overcharged with fecal matter. There had also been, in previous years, cases of sudden illness, and even death, which were ascribed to the unsanitary surroundings. The disease was quite unlike enteric fever. Dr. Bridges thought it was caused by the exhalations from the sewage-sodden land on which the elder boys were put to work, and to which the younger ones who ran in the playground were not required to go; thus was explained the much greater incidence of the illness upon the bigger boys, as well as the escape of those boys who were confined to the infirmary. It must not be forgotten, also, that the rainfall from June to September was only one-fourth of the usual amount; this fact may have partly influenced the outbreak. It is well that these facts should be known far and wide, because the extensive use now made of earth closets in districts where there is difficulty in disposing of fecal accumulations must be placing many localities in a condition similar to that of this orphanage; and if this kind of epidemic illness has any relationship to such surroundings, there will probably not be long to wait for proof thereof. But, until such proof is forthcoming, it may be wiser to withhold one's judgement. At any rate, sanitarians are indebted to Dr. E. Seaton and to Dr. Bridges for calling attention to this outbreak of illness, and for the suggestion as to its origin which Dr. Bridges has made. Now that notice of it has been published, it will be interesting to learn if other outbreaks of the kind have been observed."

The Cure of Angina Pectoris.—The Medical News writes: In the Bulletin Général de Therapeutique, for September 30th, Huchard has an important communication on this subject. In the first place, he distinguishes most carefully the pseudo-anginal attack from the true, and his remarks upon treatment apply to the latter alone. He regards the disease as an affection of the arteries of the heart, and not a cardiac neurosis, and quotes numerous facts in support of the position. As adherents to this view he claims Germain Sée, Potain, and others, and even Lancereaux, who formerly regarded it as a neurosis. Perhaps the majority of writers on the subject are of the opinion, which has had numerous supporters since the days of Edward Jenner, that the actual lesion of the disease is in the coronary arteries.

An arterial malady must be met by arterial medication, and as the blood-pressure is always increased in the affection, all remedies

which heighten the vascular tension must be avoided, as ergot and digitalis. He refers to a curious observation of Wesley Mills, in which anginal attacks followed the local application of ergot. For the relief of the paroxysms, we have at our command amyl nitrite and nitro-glycerine, which causes vasodilatation, lowering of the blood-pressure, and increase in the vigor and frequency of the heart-beats. They relieve the angina alone, and are in no way curative, but Huchard believes that the iodides possess the means of so modifying the arterial condition, that a positive cure may be effected. In 1883 he reported six cases which had been greatly benefited by their use, and since then he has had twenty-five patients under his care, of whom fifteen have recovered completely, six have been much improved, and in four cases the effect of the treatment was negative. The possibility of any of these being pseudo-anginal cases was carefully excluded. This brilliant result he attributes in a great part to the action of the iodides on the sclerosed coats of the vessels. The chief element in success is perseverance in the treatment for many months, at least fifteen to eighteen; from fifteen to forty-five grains of the salt are taken daily, until some months have elapsed from the last attack. The administration of the drug may be kept up for as long as three years, to insure durable and certain recovery. He prefers the iodide of sodium for prolonged use, as the potassium salt, when employed for many months, has a weakening effect upon the heart; moreover, it is better borne and more readily assimilated.

Details are given of six cases, in which the results of the treatment, as narrated, are truly remarkable, and certainly justify the prolonged trial of the remedy in this terrible affection. The usual care must of course, be exercised in these cases to regulate the diet, and remove all sources of mental worry and disturbance. The four cases of failure show that the remedy is not always curative, but in such instances the arteries may be in a state of calcification and past medication.

A Case of Partial Laceration of the Urethra Successfully Treated by Continuous Dilatation.—D'Arcy Power, Curator of the Museum at St. Bartholomew's Hospital, reports in the British Medical Journal: "The following case is one of interest, as it represents a type of injury which is usually attended with the most disastrous results to the patient, and in which the treatment is of little permanent benefit. The patient came under my care whilst acting as house-surgeon to Mr. Savory, but I have purposely delayed publishing an account of his injury in order to allow as long a time as possible to elapse, and to prove whether the benefit was in reality lasting, and not, as is too often the case, merely temporary.

S. Y., aged 23, a gasfitter on a railway, was admitted to Abernethy Ward, St. Bartholomew's Hospital, on March 20th, 1883, at 10 in the morning, with the following history. At 7 A. M., he had fallen astride the buffers from the top of a railway carriage. After a few minutes' rest, he was able to walk home to breakfast, feeling a little pain in his hips. On trying to pass water, however, he experienced great pain in his perineum, and blood issued from his meatus. He therefore applied for relief at the hospital. On admission, his perineum and scrotum were bruised and edematous. At 2 P. M., Mr. Savory introduced a No. 8 silver catheter, but, finding a slight resistance at the membranous part of the urethra, he immediately withdrew it. A good deal of blood followed the catheter. The patient was directed to hold his urine as long as possible. On the following day blood-stained urine passed in a stream, though with pain and a sense of resistance to its flow. The patient only micturated once a day for the next week. On the sixth day after the injury the urine ceased to contain blood, and the patient only felt pain when his bladder was full. On March 30th, ten days after his admission, a No. 8 silver catheter was passed into the bladder, and urine was drawn off. The patient was discharged the same day. A fortnight later the patient noticed that his urine began to pass in a smaller stream than before; and

on April 22nd, this difficulty culminated in retention, a complication which the patient himself treated successfully by immersing his penis in hot water. On April 24th, the patient was readmitted to the hospital. At this date, a tight stricture was found in the membranous part of the urethra. A No. 2 silver catheter, however, was passed, and urine was drawn off, the instrument being allowed to remain in the bladder for five minutes. On April 27th, a No. 3 silver catheter was passed at 1 P. M., and retained in the bladder until 10 P. M. On May 1st, it was found that a No. 3 silver catheter would not pass, and a No. 2 could only be passed about a quarter of an inch into the stricture; it was left in this position about ten minutes.

On May 4th, a No. 2 could not be passed, nor could a No. 1 be introduced into the bladder; the urine, however, dribbled away.

On May 11th, after the patient had taken a warm bath, Mr. Savory passed a silver catheter, graduated from No. 1 to 3, into the bladder; there was no hemorrhage, but clear urine was drawn off. The catheter was retained for nineteen hours, during which time the patient passed a considerable quantity of blood-stained urine; his temperature fell to 97° Fahr. At the end of nineteen hours, the catheter was withdrawn, and replaced five hours later, when it was retained in the bladder without pain for a further period of eight hours.

On May 18th, a No. 1 silver catheter was passed with ease, and was kept in situ for forty-four hours, when it was replaced by a No. 3, which, except for an interval of three hours, remained in the bladder for forty-eight hours, and was replaced by a No. 4 on May 22nd.

On May 27th, a No. 10 silver catheter was passed, and was retained until the following morning. The patient was taught to pass a No. 10 black rubber catheter on himself, and was discharged, with directions to introduce it himself every night, and to come to the hospital once a week. He followed his orders implicitly, and I saw him from time to time, and satisfied myself that a No. 10 readily passed into his bladder. I then lost sight of him for a time, but he reappeared with retention after a drinking bout; he was relieved, and, since that time, he has been able to pass a No. 10, which he still does about once a fortnight.

The diagnosis in this case was rupture of the membranous portion of the urethra. The laceration was probably small, and, owing to the prompt treatment, and to the control which the patient appears to have possessed over his bladder, there was little or no escape of urine into the surrounding tissues. The wound in the urethra soon healed, and, for the time, the patient was cured.

After an interval of two or three weeks, however, the newly formed fibrous tissue began to shrink, and a "traumatic" stricture was formed. The patient again applied promptly for relief, and, by steady and almost continuous dilatation, the tendency to contraction was overcome. The contraction, however, was unusually rapid, as is shown by the fact that, whilst a No. 3 silver catheter could be passed on April 27th, No. 2 could not be passed through the stricture on May 1st, and, on May 4th, No. 1 would hardly pass as far as No. 2 had done forty-eight hours previously. The continuous dilatation being once commenced, however, the stricture rapidly yielded, and in a short time, as Sir Henry Thompson has shown is ordinarily the case, a leap could be made from No. 4 to No. 10. When complete dilatation had been thus effected, the stricture was prevented from contracting by the occasional but systematic use of a catheter. Until now, after the lapse of eighteen months, the patient has been so well drilled into habits of regularity in this respect, that it may be hoped he is safe from further trouble. These habits were further enforced by the prompt relapse which ensued upon their disregard.

THE FIRST MANIFESTATIONS OF THE ACTION OF SYPHILITIC VIRUS.—Prof. H. Zeissl, Vienna, according to the Polyclinic, writes as follows in Annales de Dermatologie et de Syphilographie:

The first manifestation of the action of the syphilitic virus is seen at the point where it has entered the system. The lesion, however,

at the point of infection, has not always the same appearance. This depends upon the nature of the vehicle which carries the virus, whether it is an irritant, such as pus or sanies; or an indifferent fluid, as blood, serum or lymph. In cases in which the syphilitic virus is mixed with a purulent fluid, the irritating effect of the pus is soon evident; the part presents a circumscribed hyperemia and swollen appearance; in a short time the swelling ends in suppuration and ulceration. The deeper the lesion by which the syphilitic virus has entered, the more rapid and more intense is the swelling and suppuration. In these cases there is formed an ulcer, varying in size. It is only later that the tissues of non-syphilitic persons undergo, at the point of infection, the pathognomonic change which is considered as an indication of syphilitic infection.

The tissue in question is hardened, indurated to a varying degree, and at the point where the syphilitic virus acts, is found the change which is regarded as the initial sclerosis of syphilis. But when the syphilitic virus is carried by a non-irritating vehicle, such as the blood, or the intercellular substance, its insertion is not followed by irritation or ulceration at the point affected, and it is only at the end of several days or weeks that a papule appears at the point where the virus has entered. This papule gradually loses its epithelial covering, and becomes indurated, so that it is evident to the touch from its hardness and resistance. In many cases the development of the local affection is preceded by a slight erosion, varying in extent.

In a few cases, however, experience teaches that there are some persons affeeted with a mild latent syphilis, without any syphilitic lesion of the genital organs, or of any other region, who infect their wives. In the latter, however, there is not found the syphilitic sclerosis which is the lesion of syphilis. With these women syphilis is manifested by a rapid diminution of nutrition and a progressive decline. Gradually they lose their hair; at times periosteal pains and exostoses occur at certain parts of the skeleton (sternum, crest of the tibia, etc.); later profuse and frequent metrorrhagia appears. All these symptoms may disappear under the influence of anti-syphilitic treatment. The persistence of syphilis in these cases is only evident from the fact that if they become pregnant they generally abort, or if pregnancy does not occur they suffer from metrorrhagia. The manner in which the syphilitic virus enters the system in these women is not yet explained. Again, it is not known how a woman who is affected with latent syphilis, and in whom there cannot be found any focus of syphilitic virus, may infect her husband with syphilis.

Evolution of the Syphilitic Sclerosis.—The mode of development of the initial syphilitic lesion depends upon the mode of infection, in other words, upon the nature of the material which serves as the vehicle for carrying the virus, and upon the lesion which occurs at the time of infection. If the infecting material comes from an ulcerated sclerosis or papule, and if the infection takes place in a deep lesion of the skin, the injured part, in a few days, is transformed into a more or less purulent ulcer, which, however, at first does not present any external characters that may indicate its syphilitic nature; even the most experienced practitioner is unable to distinguish the ulcerations caused by a syphilitic virus from those due from other causes. It is only later that this distinction is possible.

In cases where the infecting virus is not mixed with pus, but with the serous fluid that habitually oozes from the surface of the sclerosed ulcer, or with the blood of a syphilitic, or again, if there is only a slight excoriation at the seat of contamination, the infecting substance not being purulent, it has not an irritating action, and does not produce an ulcer at the point of entrance. On the contrary, the excoriation cicatrizes rapidly, and after a more or less longer period of incubation, there supervenes a papule, varying in size, which in cases where the skin passes into mucous membrane (the labia majora and minora, at the anus), often resembles a moist papule (mucous patch), in the early stage.

The papule retains its primitive form until it entirely disappears or it ulcerates. The ulceration at times extends to the base of the papule; sometimes it is limited to the superficial layers. Its progress is generally very slow; the disintegration of the papule is rapid only in certain regions, when it then occasions a very deep loss of substance, while in other localities it is only the epidermic or epithelial layers which are destroyed, so that the focus of infection for several days resembles rather an erosion than an ulcer, which gradually takes the character of a sclerosis. The tissue becomes more and more indurated, and the induration often exceeds the limits of the apparent erosion.

The induration or sclerosis, with all its phenomena of evolution and absorption, does not arise from an incidental deviation of a normal process of ulceration, as the opponents of the doctrine of duality suppose; it is the result and necessary manifestation of the action of the syphilitic virus, and is not produced all at once, but is gradually developed at intervals.

Sometimes the induration is arrested in its progress of evolution, but later takes on a more rapid development. It may reach the size of a lentil, pea or bean, and may also extend over a large portion of tissue, involving the labia majora and minora, the cutaneous tissue of the glans as far as the middle of the dorsum of the penis.

The size and extent of the induration has no prognostic importance, in regard to the benign or malignant nature of syphilis. Small and recent indurations, however, yield, generally, more easily to treatment than those which are large and chronic. The absorption of the induration begins at the centre, and is explained by the injured tissue having less power of resistance, it becomes less hard, and after the disappearance of the sclerosis leaves a red-brown pigmentation, which corresponds in size to the induration. The pigmentation gradually fades away, and the part originally affected becomes whiter than the surrounding healthy skin. This always takes place in all superficial cicatricial tissues of new formation. At the seat of induration, and if there does not exist at the same time a chancroidal ulceration, a central depression is present, which becomes more and more evident with time; but it is seldom that the cicatrix resembles one produced by ulceration. It is only with indurations coexisting with chancroids that there occurs a loss of substance and a deep cicatrix. The excision of the induration does not stop the development of the secondary phenomena; frequently, as previously noticed by Delpech, the induration is reproduced at the seat of incision.

CONTRIBUTION.

MASSAGE.

BY L. H. ENGELKEN, M. D., ST. LOUIS, MO.

Read at the "Verein Deutscher Aertze."

GENTLEMEN:—Massage or the art to treat and cure diseases by rubbing, kneading and stroking, is no invention of recent date. The oldest Chinese writings, about 300 years before Christ, are said to mention a kind of kneading cure, which resembles our own to a very high degree. Similar to this has been the "surchuna" of the Persians" the "anatripsis" of the Greeks and the "frictio" of the Romans, of which Martial sings

> Tercurrit agili corpus arte tractatrix
> Manumque doctam spargit omnibus membris.

Like so many promising therapeutic acquirements, the art of massage expired in the Middle Ages, at least among the Western Nations while in the East its reputation remained undiminished. It was left to more recent times to restore among us the ancient renown of this valuable remedy and to introduce into scientific medicine stroking and kneading, which for so long a time had been looked down upon as belonging to the domain of shepherds and old women. The first impulse came from France, and it is thus that the French expressions for the various manipulations of massage are used to this day by all other nations. Subsequently the German doctor Metzger, of Amsterdam, brought the method into prominence, practicing it with great skill and brilliant success. He is to this day the highest authority in thi sphere and high and low, from all parts o the civilized world, go to him to seek relie

from pain and disease. He has, however, to my knowledge, published no work, or at least none of importance. With his great practice he probably can apply his time to better purpose. Others have learned from him, thus for instance Mosengeil, of Bonn, who in 1875, at the Congress of German Surgeons, referred to massage, described its applications, suggested indications, and recommended the same most urgently to the consideration of his colleagues. Since then it has been practiced in clinical hospitals and by many private physicians, but by no means to the extent it deserves. Especial merits in its propagation are due to Esmarch. Five years ago there existed hardly any literature on this subject. I made vain endeavors at that time, after having learned the different manipulations from a pupil of Metzger's and practically applied them upon many occasions, to procure through books further instruction. Since then, however, important literature has appeared, so, for instance by Schreber, the same who wrote the well known book on gymnastics, by Rossbach and many others, not to speak of very numerous smaller publications. In scrutinizing this class of literature the striking fact presents itself, that massage turns its adherents into fanatics, just as well as we are accustomed to see it in any other specialty of medicine. The hydropath cures every disease with cold packs, frictions and half baths; the electrotherapeutist applies his electrodes to the same diseases and waits for the wonders that are to follow; the massageur rubs and kneads, in the true sense of the word, everything that happens to come under his hands. There is hardly a disease which has not been cured by aid of rubbing and kneading. It shall be my object to separate, at least to a certain extent, the wheat from the chaff, by describing to you more accurately the positively certain indications only, and by proving them from my own experience, touching but slightly upon the rest, the uncertain, doubtful, or even improbable. At first a few words upon the method of application and the various manipulations, which of course can be described only imperfectly. Anything of this kind you must have seen and experienced yourselves. Massage is seldom practiced alone but mostly in connection with hydropathic procedures, as cold bandages, packs, baths and shower-baths. Sometimes also medicines are used in the rubbing process, a few instances of which I will give you. There is lastly electric massage, which sometimes proves a very effective combination of both physical methods. Previous to the sitting the diseased part is washed and carefully shaved, and the hands of the massageur well oiled. Then the actual treatment of stroking, rubbing, kneading, pressing, hitting, and knocking may begin. Stroking, (effleurage) is done with the palm of the hand, which clasps the suffering parts, say for instance a joint. The fist is used over more fleshy parts; to tendons or smaller joints the finger ends are applied. Almost unexceptionally rubbing and kneading (massage á friction and pétrissage) are combined with stroking in such a manner as to distribute the various manipulations between the two hands. Rubbing is done with the finger ends or the fists, which are passed around on the sick part with pretty great force. Kneading is not unlike the kneading that is done by the baker, the ends of the fingers, knuckles, or fists entering into the tissues, pressing and squeezing those that are caught. Finally remains hitting and knocking (tapotement);these are less frequently employed, are in many cases even contraindicated, in others however accompanied with excellent results, especially when it is desired to permeate thick masses of muscle. Hitting consists in the quick and continuous working in of the finger ends and knuckles. Knocking is done with the palms or with the sides of the hands, never forcibly with the full arm, but always loosely from the wrist. The difficulties of massage do not so much consist in the separate manipulations, which to be sure are not so easily to be learned either, but in the rapidity, skill and power with which they are effected. It requires practice to acquire these qualifications. A good amount of physical strength is indispensable to a good massageur. Even the strongest must learn first to economize his strength, for the power employed must steadily increase towards the end of the sitting. In order to facilitate matters it is advisable for the operator to do his work in as comfortable a position as possible, not for instance in a half-twisted position or on his knees. He must be able to work both arms with perfect freedom, and therefore take off his coat; he must keep both arms at an equal distance from the object under treatment in order to go into action with full force. Concerning the patient, care must be taken that the blood in the diseased parts can circulate freely. To accelerate the evacuation of the blood vessels, that part of the body is, if possible, placed higher than the rest. After the sitting, which is generally concluded with active and passive motions, I place a damp bandage round the part, lay it high and leave the patient well covered to take rest. Before applying the bandage many prefer to

rub in one to two tablespoonfuls of spirits of wine or brandy with a view of adding to the treatment a stronger irritation of the skin. The physiological effects of massage are of a very simple nature and easy to explain.

It is evident, that centripetal stroking must cause an acceleration of the lymph current and venous circulation, while the arterial afflux is checked. Therefrom arises the antiphlogistic effect. Through rubbing, kneading or pressing exudations and extravasations are reduced and taken up by the vessels, and are then removed by simultaneous stroking; consequently larger accumulations of exudation are rendered impossible, through the accelerated interchange of fluids, and those already formed are absorbed. With the diminution of inflammation and swelling the pressure on the nerve ends will cease, and we find severe pains vanishing during the procedure of massage. On the other hand, massage acts upon paralysed parts of the body and those which are lowered in nutrition as a reviving agent that invites circulation and thereby leads towards a quicker apposition of nutritious substance; new forma tion of muscular substance takes place and fatty degeneration ceases. Especially the tapotement renders valuable service in this respect. Massage, however, must be of most injurious and often really pernicious influence in all inflammatory processes accompanied by suppuration. Moreover when septic material is present in the seat of inflammation, spreading of the suppuration or a general infection with sepsis will surely follow. The greatest caution in the diagnosis is recommendable in chronic inflammations of the joints, where by stirring up a hidden focus of suppuration, the whole joint may be affected, and a rapid purulent inflammation of the granular masses may be the consequence. Massage, therefore, in the hands of laymen—who are unable to appreciate or understand these conditions, is ever a two bladed weapon, which sometimes instead of shortening the disease cuts off the patient's life. I now continue to describe to you the effect of massage in the various diseases, and begin with the affections of the joints and muscles, because in these the effects of treatment are most evident. In the simple and uncomplicated distorsions of a joint, which are caused by external violence, the tendons and ligaments are stretched and partially torn. It frequently occurs that the capsule becomes bruised between the bones; we find the joint swollen, painful at touch, and surrounded by an effusion of blood. In such cases massage almost invaraibly mitigates the pain during the first sitting. Two or three further sittings on the same or following day remove the swelling, and the patient may be allowed to walk a few steps. If pain and swelling does not reappear then, the use of the foot is continued and gradually increased, until recovery is complete. The duration of this treatment, as compared with others, is very short. Should there be fractures near the joint, rest is necessary, but in the beginning at least a diminution of the bloody suffusion and swelling may be obtained by massage. It is very useful as soon as there is ground to suppose that the fracture is healed, to resort to massage again in order to remove exudations and to reestablish flexibility. The following case I give you as an instance: A man was injured by falling from a horse to such a degree that the internal malleolus of the right tibia was completely torn away, the fibula being broken in the upper portion of the lower third. The foot was hanging on one side; the joint of the tibia lay bare, only covered by the tightly stretched skin. Near the knee-joint the fibula was broken a second time. After the joint had been kept quiet for fourteen days I began with massage. A week and a half later I was able to let the patient make his first attempts at walking; four days later, four weeks from the time of the injury, he visited on foot a friend, who lived at a distance of about ten blocks. Surely this was an extraordinary result. The joint is restored completely and is freely movable now in all directions. Stiffness of the joints, attachments of the tendons to their sheaths, and constrictions of the articular capsules which occur so frequently through long continued immobilisation, particularly in older people, can be removed by massage. Eulenburg reports cases which were referred to him with the diagnosis, "osseous anchylosis" and in which he nevertheless restored full mobility; of course the diagnosis had been false. Likewise, it is possible to effect the formation of a new, or so-called pseudarthrosis in absolute luxations. I recall to my mind most vividly a case which I treated some years ago in Hanover. It was a luxatio humeri subcoracoidea, in which the reduction was impossible. The head of the humerus was below the processus coracoideus, imbedded in thick inflammatory deposits. After eight sittings the swelling had disappeared so far that I was able to feel distinctly the contour of the bone; two weeks later the patient could move his arm freely in all directions, except upwards, where it met of course with an obstacle in the acromion. Inflammatory diseases of the joints—acute purulent excepted—are very accessible to

massage treatment. Serous effusions in the joints and sheaths of the tendons are also treated with the greatest success. It is advisable in cases of acute dropsy to let the first inflammatory stage pass; only later when the case becomes more chronic, and reabsorption of the effusion tarries to take place, the kneading cure may be instituted. Here it rivals the puncture and also considerably aids the same in re-establishing the normal function. I completely cured a laborer in a week who had suffered for six weeks from hydrops genu in the highest degree, and who had tried everything imaginable. After hisseven days of treatment he returned to his usual outdoor work against my will and strict command. Obstinate and very long standing cases of dropsy, which had led to considerable relaxation of the capsule and ligaments, and deformities of the bones, I tried in vain to cure in this way, although I never failed in obtaining a diminution of the effusion. Also in cases of chronic inflammations of the joints tumor albus, rubbing and kneading has been frequently applied with success. There can, of course, be no doubt of brilliant results; the treatment must be carried on for a pretty long time. Unsuccessful cases, which are reported now and then, rest upon errors in the diagnosis, for which, however, the doctor can hardly be blamed. Whether there exist granular deposits in the bones, whether small quantities of pus are already produced in the depth, this is often difficult or impossible to ascertain by our scientific means and methods of to day. As a rule, make a trial with massage only in the early stage of this disease. If during the massage cure acute inflammatory exacerbations of the process should occur, characterized by increased swelling, pain and fever, it will be better to abandon this method and supplant it by some other kind of treatment which is less violent. General infection with tuberculosis, viz., dissemination of tubercle bacilli, of which one should suppose that it might be provoked by the rubbing of the tuberculous joint, has, so far as I know, not yet been observed in connection with it. Allow me to classify together all that comes under the heading of rheumatism, although, perhaps the rheumatic diseases have nothing more in common than their name only. For rheumatism articulorum chronicus, massage is an exquisite remedy which is calculated in conjunction with hot baths and electricity, or alone, to relieve considerably even those most seriously ill. I say to "relieve" not to "cure," for I have never observed complete recovery; relapses do occur. Just in this disease a great many observations are at my command, which I had an opportunity to make as medical superintendent of a home for incurable patients. Only lately I observed at a German clinical hospital a case of this kind, in which the result was a brilliant one. It is different with the arthritis deformans; here the results are absolutely bad. There can be no chance for recovery in more advanced cases with great anatomical changes. Even to arrest the process was impossible for me in the two or three cases where I made the attempt. In malum senile coxæ, I observed under the massage treatment an improvement of the atrophic muscles, while the disease of the joint and bones did not show the slightest change for the better. Muscular diseases, acute and chronic rheumatism of the muscles, contraction, for instance, wry neck, further myositis and rupture of the muscles, deserve to be mentioned as treated successfully with stroking and kneading. The more recent rheumatic diseases are, the easier they can be removed. Generally, a few sittings, frequently a single one suffices. But lately I treated a case of rheumatic affection and contraction of the muscles of the neck and of the right sterno-cleido-mastoid, accompanied by considerable inflammation of the tonsils. The patient suffered severely and his condition grew worse from day to day. I then instituted massage treatment. After the first application for one half hour pain and swelling had disappeared: the head was straight though not yet freely movable. In the evening I repeated massage, and on the following morning I dismissed the patient cured. In very old cases of muscular rheumatism, even when far progressed atrophy and serious disturbances in the nutrition of the affected groups of muscles have taken place, a complete cure may yet be obtained by the kneading treatment if energetically carried out, although only after several months application. Also inflammations of the sheath of the tendons, particularly of the fingers, are cured by massage more readily when treatment is applied, during the early stages. Of nervous diseases those of peripheric origin only can be treated by massage, but these not seldom with good and prompt result. But I warn you not to stir up a fresh and violent neuralgia, for in many cases instead of the hoped-for relief an aggravation of all symptoms may follow. Experience has taught me that this will more readily occur with such nerves as pass over long surfaces. The best results I observed were in sciatica. For chronic sciatica complicated with paralysis and atrophy of the affected leg Schreber has devised a perfect system of

massage in combination with active and passive motions, and he describes cases of the most desperate kind, the good final results of which speak greatly in favor of his method. Berghman and Helleday report to the same effect. Treatment generally lasts up to five weeks. I have herewith exhausted the principal indications; as to those which are not yet ripe for judgment, you will please excuse me for not touching them.

Only to two facts more I want to call your attention, that is to the great influence upon the circulation in the neck and head, which can be obtained through massage, and to the promotion of the activity of the bowels by kneading the abdomen. In the case of torticollis I have reported above there was at the same time, an intense tonsillitis together with swelling of the maxillary glands. Here I was able to feel distinctly, while rubbing, that the glands grew smaller and softer. Immediately after the sitting the patient could swallow a great deal better. This effect, which has been studied by numerous observers, must be traced back to the depletion of blood-vessels through the manipulation and consecutive decrease of inflammation. Anemia in the head can become so great that cases of fainting may occur. Therapeutically this circumstance, as you may imagine, can be put to account in many ways, beginning with ordinary cold in the head, up to inflammation of the brain.

It seems strange that the mucous membranes secrete more freely after massage. This is especially the case in catarrhs of the larynx and trachea, Hence the recommendation of Béla Weiss to apply massage to the affected parts in cases of croup in order to dissolve and force out the fibrinous exudations. I once made an attempt with massage in a case where tracheotomy seemed necessary and obtained a most brilliant result. Whether post or propter hoc I dare not decide. Finally I cannot forbear to entertain a theoretical doubt. When the membranes are very large and are really detached by the rubbing, they might, if the child does not succeed in throwing them off, suddenly obstruct the trachea,and instant death might follow.

With reference to the application of massage to the abdomen, it represents a valuable aid in the struggle with that crux medicorum, chronic constipation, because it promotes, especially if used together with electricity, the peristaltic action to a high degree, and invigorates the muscles of the stomach.

I conclude with the description of a case, which illustrates to you the effects of the medicated massage, if I may call it so:

A young lady, in descending from a carriage, struck her left leg. The following day she experienced severe pains through the whole leg and was unable to walk. Externally nothing could be noticed, except a contusion, which, when pressed, was but little painful. As contusions and sugillations quickly disappear under massage treatment, I applied it with, however, no result whatever. A few days later I discovered in the hollow of the knee two small swollen lymphatic glands of the size of a pea connected by a hard cord. I now diagnosed an inflammation of the deep lymphatic vessels, rubbed the part with mercurial salve, covered the leg with hydropathic bandages and continued massage. But all to no purpose, the pain and lameness remained uuchanged. I finally conceived the idea to mix the mercurial salve with oil and to massage with this salve. The consequence was that the patient was completely cured after two applications. It would have been impossible to continue the treatment any longer, for the mercury was driven into the skin with such force and absorbed so rapidly that there were signs of intoxication immediately after the sitting, consisting in sickness at the stomach, languor, dryness of the throat and metallic taste in the mouth. Since that time I massage lymphatic glands with good result, using mercury salve instead of soft soap or iodine salves which are administered by others to the same purpose. I remind you of the experiments made by Berghmann,Rindfleisch and Roehrer, which have proved that medicines in the form of salves are absorbed by the normal skin then only when they are driven into the orifices of the sebaceous and sudoriferous glands through very powerful frictions. When this friction is applied in the form of massage the absorption of medicaments takes place more rapidly yet, and adds its effect to that of the rubbing and kneading procedure.

—A bill is being prepared by the New York Medical Society asking the State Legislature to include cocaine in the list of drugs forbidden to be sold excepting on physician's prescriptions. It is said that in New York many drug stores sell a paste made up of coca leaves and lime forming a cud similar to that used by the Peruvians as a stimulant. These preparations are in great demand.

—A death from yellow fever occurred on the steamer Venezuela, at New Orleans, last week.

CLINICAL LECTURE.

GASTRALGIA.— CHRONIC CATARRHAL DYSPEPSIA.—CATARRHAL JAUNDICE.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

BY WILLIAM PEPPER, M. D., LL. D.

Provost of and Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania.

REPORTED BY WILLIAM H. MORRISON, M. D.

Gentlemen, I shall to-day bring before you certain cases of digestive troubles and shall pass them in rapid review. Our first patient is this man, aged 45 years, a quarryman by occupation. He is married and has a family of healthy children. His general health has been good until recent years. He has never had venereal diseases. His habits have been good, but he has been much exposed to cold and violent changes of temperature. About fifteen years ago, this man first had pain in the right hypochondriac region. This pain seemed to be increased by eating, and was relieved by vomiting. It came about two or three hours after eating, and continued until vomiting gave relief. Following this there would be great irritation of the stomach, with excessive thirst, calling for the use of large quantities of water, which were at once vomited. When the attacks first made their appearance they came about three or four o'clock in the afternoon and continued until night. In the interval between the attacks, he felt moderately well. This pain has been felt almost every day for the past fifteen years.

Before going further let us analyze these attacks and try to learn their nature. Note in the first place that they are paroxysmal in character. The duration of each attack was considerable. The patient would eat his dinner at twelve o'clock, and the pain would begin to appear at three o'clock. It is, therefore, hardly correct to say that the pain was increased by eating. Since the attacks appeared the pain has been growing more severe, and now comes sooner after eating, but for a long time the pain came three hours after eating, when the gastric digestion was almost finished and when the stomach should be empty. It is also noted that this pain would be relieved by vomiting and after this there would be great irritation of the stomach. The pain was also relieved by the ingestion of stimulant articles of food. Red pepper with water would relieve the pain. It was also relieved by pressure, and the patient found the most comfortable position to be on the face.

You will not be at a loss to recognize in these spells of pain attacks of gastralgia or neuralgia of the stomach. This is shown by their paroxysmal character, by the fact that they occur not immediately after taking food, but come at the time when the gastric digestion is advanced and the stomach is becoming empty, and its coats are exposed to the acids resulting from the imperfect digestion of the food. Evidently there was with this gastralgia, an element of gastric catarrh, rendering the stomach irritable.

The attacks of pain have increased in frequency since one year ago, and now he has an exacerbation of pain every day one hour after eating. The pain is most marked over the region of the pylorus a little to the right of the median line. There is some tenderness on pressure at this point. During the attacks the pain spreads across the epigastrium and through to the back. The appetite has always been good, and at times it is voracious It has never been unnatural and craving, as sometimes happens in this affection. The bowels are regular. He has to urinate very frequently, every forty-five minutes, and passes a small quantity of reddish urine. During the last year he has lost considerable flesh. One year ago his weight was 180 pounds; it is now 140 pounds. He has also lost strength. The urine contains neither albumen nor sugar.

He was admitted to the hospital ten days ago. The day following admission, he had a sharp attack of pain, but since then he has been better. He has had no pain for the past week and has only vomited once since admission.

Here then is an exceedingly well marked case of gastralgia. I do not dwell upon upon the diagnosis, for the attacks are so very characteristic. As to the cause of the attacks in this case, we are somewhat in doubt. The man's habits are good; his food is necessarily coarse, and he is much exposed. He is not intemperate in his use of tobacco although he uses it every day. He partakes moderately of tea and coffee. It is not improbable that in the sensitive condition induced by the breaking down of the system from exposure, cold and damp, and from the catarrhal irritation of the stomach, that the moderate indulgence in these stimulants has been sufficient to ex-

cite the attacks of gastralgia. We do not find here, as we do in many cases of gastralgia, a definite cause. It is usually associated with a tendency to depression of vitality and exhaustion of what ever form which makes the system and particularly the nervous system, sensitive and depressed. This man has been forced to work and it is therefore not strange that the symptoms have continued.

In this case, it is noted that there is pain over the region of the pylorus. This is not constantly found in gastralgia. The epigastrium is often entirely free from increased sensibility. Gastralgia is however often associated with subacute inflammatory states of the lining membrane of the stomach. We then have a mixed case, and there may then be distinct local tenderness associated with the irritated state of the mucous membrane. This man has undoubtedly had from time to time catarrhal irritation of the mucous membrane of the stomach, but these attacks have not been very pronounced.

The only condition which might be suspected in such a case as this would be ulcer of the stomach, but it requires no discussion to eliminate that. The fact that blood has never been vomited, the character of the pain coming on not immediately on the ingestion of food, but some time later, the relief by stimulant articles and the moderate amount of tenderness would exclude this. In gastric cancer such spells of pain as these may occur. There has been no obstruction of the pylorus and the bowels have been regular, and this case has lasted so long that no idea of serious organic disease can be entertained.

The prognosis in these cases is favorable, if control of the patient can be gained. In many cases, the conditions are as in this case. As soon as a little relief is gained, the patient is obliged to return to work. In many cases, the cure is facilitated by a change of the habits of life and change of climate. In such a case as this, we are limited to diet, drugs and general directions in regard to dress, rest, etc.

In regard to diet we exclude all substances which like alcohol, tobacco and the excessive use of coffee and tea, may help to keep up the irritated state of the mucous membrane of the stomach. For this man, I should recommend a diet something like this. For breakfast, mush and milk with a soft boiled egg. At ten o'clock, half a pint of milk with a tablespoonful of lime water. Dinner, a pint of milk, with stale bread and a small piece of meat. The milk may be heated, or mixed with boiling water. At three o'clock milk and lime water again. Supper, hot water and milk, toast, a soft egg, or oysters. I thus give three light meals and in the intervals, at about the time that the stomach has disposed of these three principal meals and become exposed to the gastric juice, I give small quantities of milk and lime water. This distribution of nourishment is often of great importance in the treatment of gastralgia. It is sometimes necessary to go further and put the patient on an absolute milk diet, giving a small quantity every hour and gradually increasing the quantity and lengthening the intervals. This diet should continue until all tendency to neuralgia is overcome.

When this man came into the hospital, I ordered five grains of sub-nitrate of bismuth and pepsin with one-eighth of a grain of morphia before each meal. The pain was so excessive, and it was so important to check it at once, that I resorted to the use of morphia against my will, for I never like to use it where it can be avoided. I propose now to gradually withdraw the morphia. I shall now order powders containing six grains of subnitrate of bismuth and pepsin and reduce the dose of morphia to one-twelth of a grain. The morphia does not seem to have interfered with any of the functions. We shall be fortunate if the symptoms do not again come into prominence as the morphia is removed. They certainly would if we did not correct the diet. If you use opiates in any chronic case, it must be associated with such thorough hygienic treatment and regulation of diet, that all the time the fundamental disease is being subjected to radical cure.

Chronic Catarrhal Dyspepsia.

The next patient presents another type of gastric disorder. He is 35 years of age and by occupation a saloon keeper, a moderate drinker, and comes complaining of stomach trouble of about two years duration. The symptoms have chiefly been failure of appetite, a heavily coated tongue, a bad taste in the mouth, constant hawking and raising of mucus, frequent vomiting on first rising in the morning of glairy mucus and green colored liquid, weight and fulness in the epigastrium, a constipated state of the bowels and frequent headaches in the front and back of the head. At times there is soreness and tenderness of the eye-balls. During the past two years there has been a loss of flesh and strength, the weight having decreased twenty pounds in that time. The patient has grown pale, weak and easily tired.

This is an equally typical picture of chronic catarrhal dyspepsia, where the lesion has

been congestion, catarrhal inflammation with perverted secretion, not only in the stomach but also in the esophagus and pharynx. There has been more or less chronic pharyngeal catarrh connected with the dyspepsia. There is reason to suppose that there has been a further extension of the same kind affecting the function of the liver, and that from time to time there have been spells of lithemia, resulting from the torpid and imperfect action of this organ and the imperfect assimilation of food.

Before these troubles appeared the patient had been in the habit of eating all kinds of food and at very irregular hours, the morning meal often being substituted by liquor or beer upon a totally unprotected stomach. It is remarkable that this practice could be kept up so long without the appearance of dyspeptic symptoms. It is a misfortune to many persons to have a good stomach. A person with a sensitive stomach and weak digestion suffers so seriously from slight indiscretions that he soon learns what he can do and what he can not do, while a person with a good stomach will receive no warning, and may go on in a course of reckless living until serious organic disease is developed.

This man presents all the symptoms of dyspepsia of the irritative catarrhal type. We have a proof of the condition of the membranes, in the habitually coated tongue, the unhealthy mucus from the pharynx, with the frequent clearing of the throat. The stomach when not occupied with digestion, secretes a glairy acid mucus, so that in the morning it contains a quantity of this irritating matter and there is nausea until it is vomited. This morning vomiting is extremely significant of serious catarrhal dyspepsia. Then, of course, we have the appetite impaired. The presence of food increases the distress and causes weight, fulness and discomfort in the epigastrium. The secretion of the liver is also affected. The urine is reddish in color, and throws down a brick dust sediment, and from time to time this man has had so-called bilious attacks or a lithemic condition in which there would be heaviness and dulness often, with severe headache and soreness of the eye-balls. This man fortunately recognized that his troubles were due to his own indiscretions, and he has rectified his diet, and for the past few months he has slowly improved. Too often, however, when these feelings of weakness come on they suggest further stimulation, and the patient tries to drive the stomach by taking more stimulants, thus engendering more serious conditions and bringing on incurable disease.

In a case of this character the diet must, of course, be digestible and the quantity regulated by the actual capacity of the stomach. It is sometimes necessary to give an extremely restricted diet. This is, however, not often called for. If the stomach is very irritable, you may find, as in the previous case, that a milk diet in restricted quantity is required. It is often advantageous to give to such a patient, before any food is taken, a certain amount of very hot water, from two to eight ounces. The object of this is to thin the thick mucus which is in the stomach, wash it from the surface and to excite peristalsis and cause it to be passed from the stomach leaving that organ with only its proper secretion of gastric juice. Then food may be introduced. This may consist of finely minced meat which has been slightly broiled and to which a little pepsin has been added. This is highly nutritious, readily digested and quickly assimilated. A course of diet of this kind will often give brilliant results in this type of dyspepsia. This hot water treatment has of late been used in the treatment of all sorts of diseases. While it is very valuable in certain classes of cases it is distinctly limited to those cases. In improperly selected cases, it is capable of doing great harm. In this case a carefully regulated diet will, I think, be sufficient. His breakfast should consist of a glass of milk, which should be preferably hot and a little dilute, well cooked porridge and perhaps a soft boiled egg. At dinner, I should suggest a cup of hot water, a piece of tender steak or the soft parts of eight or ten oysters with a roasted potato and stale bread and butter. In the evening, I would give weak tea, a soft boiled egg and dry toast or stale bread.

In such a case as this, the drugs should be alterative and slightly astringent. If there were constipation, I should order in the morning a glass of hot water containing half a drachm or one drachm of sulphate of sodium. This will exert an excellent effect upon the mucous membrane. If the bowels were regular this should be omitted. If there were heaviness and nausea in the morning, a glass of hot water might be taken before breakfast. All irritating purgatives should be avoided for they do harm to the weak mucous membrane of the stomach. The dilute mineral acids are proper remedies in these cases. These may be given alone or with pepsin. Strychina or nux vomica may be associated. Small doses of nitrate of silver with opium or, where there is a tendency to constipation, with belladonna, are of service particularly

where there is a disposition to thickening of the membrane.

CATARRHAL JAUNDICE.

This woman illustrates another point in catarrhal dyspepsia. She is 55 years of age and married. There is nothing noteworthy in the family history. She is a hard working woman, and her habits are good. For years she has suffered with dyspepsia. Last July, as a result of overwork, she became very sick and worn out. Her digestion broke down entirely and she suffered from a severe catarrhal attack. Ever since then the digestion has been worse. About five weeks ago the orifice of the bile-duct in the duodenum was closed by a swelling of the mucous membrane and she suffered an attack of jaundice from obstruction due to the extension of the catarrhal process into the bileduct. Thus we often have catarrhal jaundice making its appearance in the course of a case of gastro-duodenal dyspepsia. In fact one of the elements in the diagnosis of catarrhal jaundice is that it has come on where there have been symptoms of mild catarrhal inflammation of the stomach and duodenum.

The jaundice is much improved. This has been effected simply by care in the diet and a little counter-irritation over the region of the gall ducts. Internally she has received very simply remedies, consisting for the most part of bicarbonate of soda with gentian; seven and a half grains of bi-carbonate of soda with two drachms of the compound infusion of gentian were given an hour after meals. In catarrhal jaundice nitrate of silver is almost a specific. A mild saline in hot water should be given in the morning, and if necessary in the evening, to remove the thick mucus, and it may at the same time render the biliary secretion more liquid. Nitrate of silver will then hasten in a remarkable way the subsidence of the swelling and the removal of the jaundice. I always use it in these cases unless the jaundice seems to be passing away of itself. I shall give this patient a pill containing one-twelfth of a grain of nitrate of silver with one grain of extract of quassia, three times a day after meals. We shall have her return in a couple of weeks that we may note the result.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, December 5th, 1885, the President, Dr. Atwood in the chair.

MELANOMA OF EYE AND ORBIT.—SPECIMEN.

DR. WILLIAMS related that an old man complained six years ago of pain in the back of the head. Soon after it travelled to the region of the eyeball and he began seeing flashes, balls of fire, etc. Some time after his vision failed in the course of a few days. Last January the eyeball began to protrude and was very painful. The protrusion increased, as also the pain, which was of an intermittent character. Upon seeing him Dr. Williams noticed that the globe was half protruded, lids not edematous; conjunctiva extremely red, due to passive engorgement, and the orbit, apparently filled out solidly. The diagnosis, of course, was a tumor of the orbit and the supposition that it was malignant. Motion was very slight in three directions only. Enucleation and removal of the tumor behind was advised. Dr. Williams made the operation Tuesday. The tumor was a melanotic one extending to the apex of the orbit. Hemorrhage was very free, but easily controlled with chromic acid. A part of the tumor was in the sphenoidal fissure. Chloride of zinc paste was applied to destroy whatever part might have been left. The bulk of the tumor was located externally to the globe around the optic nerve, mainly to the outer side. The speaker could not state whether the tumor started primarily in the globe or not. It was a rare thing to find a melanotic tumor break through the globe of the eye and get behind it. These tumors start uniformly in the choroid, fill the globe and come out forwards in the form of nodules. Of course it is very malignant, and the prognosis is unpromising.

DR. DIBBLE considered the specimen a very rare one. He had never seen one in such a position. This must have begun in the choroid, pushed through the sheath of the optic nerve and then filled up the cavity; but it is an open question as to the mode of its spread. Usually these tumors are small and fill up the eye.

DR. POLLAK said that he had presented a similar case some time ago, a man having melano-sarcoma of the eye proper, which was enucleated. Six years after the operation it recurred and also four years after that. It, however, came out anteriorly through the globe.

LIPOMA OF NATES.—SPECIMEN.

DR. BORCK said that although there was nothing extraordinary about the case every one had its interesting points. The tumor commenced growing slowly fifteen years ago

on the left nates of the man who is now 43 years old. He has consulted many, being told that it was cystic, fibrous, a hernia, etc. The speaker made a ready diagnosis of lipoma, and asked why it was that the diagnosis of tumors was not readily made? As a general rule we could reduce tumors to solid and cystic; the solid again into classes corresponding to the tissues they invaded. Tumors could be classified topographically, e. g., of the head, extremities, etc. We could then make a diagnosis by exclusion. Fatty fibrous and cystic only on nates; cystic are congenital. Two incisions were made, in order not to leave a particle of fat as it might recur. Tumors of the lip are easy to diagnose.

Dr. Bremer said that the last speaker had made several assertions he could not subscribe to. It takes a great deal of knowledge and tact to tell an epithelioma of the lip from a chancre, etc. Is there the remotest possibility of mistaking a lipoma of the nates for any other thing?

Dr. Borck said that it had been done. Indurated chancre was not a tumor. The idea he wished to convey was that it would be well to study tumors in this way, which is an easy one. It is needless to look for a tumor which does not grow in a certain region.

Dr. Bremer stated that he did not assert that chancre of the lip was a tumor. There is no doubt of the difficulty of making a diagnosis in the beginning. He did not believe the classification given a good one. We ought to be connoisseurs and not be forced to resort to such a classification.

Dr. Green did not think it necessary to be so particular in enucleating a lipoma. As a rule these tumors do not recur.

Subperitoneal Hematoma.—Specimen.

Dr. Meigenbach said a mother observed, in her one-month child, a swelling midway between the umbilicus and pubis. A midwife thought it was a hernia and applied a pad and truss. It got worse. When seen there was high temperature, diarrhea and vomiting. The tumor looked like a strangulated hernia. It had a hardened base, was reddened, and had a bluish, central fluctuating spot. The child died a few days later of cerebral congestion due to gastro intestinal derangement. On post-mortem examination the gut was found perfectly free, and under the peritoneum a tumor the size of an ordinary walnut, the bluish spot being its apex where the blood vessel burst under the skin.

Dr. Hughes was glad the subject of tumors had been brought up, as he would like to ask how many primary morbid processes there are at the bottom of tumors. It is easy to classify them as benign and malignant, or as tumors implicating epithelium (epithelioma) fibrous tissue (fibroma), etc. When we recognize a gumma, we know the underlying cause, and so in regard to cancerous tumors. How is it in regard to other forms whose name is legion. Names have been multiplied but little has been learned in regard to their underlying causes and general conditions. What is there which causes one form of tumor to develop in one part and another in another part?

Dr. E. H. Gregory said that the question could not be answered. We know nothing of the causes of tumors. When we know the cause of a lump it is not a tumor. Tumors are essentially idiopathic growths. That there is some agency back of them no one can question; but what it is, no one knows. A tumor knows no typical end, it is indefinite. Tumors are not compact although massive. Every particle in a tumor is independent of the others and if you take a living element of a tumor and engraft it, it would grow in its new location. And if you remove all but one element, it is still a tumor, and we have, not a recurrence but a continuation of the growth. We all know that some tumors are related to certain tissues or organs and each one has his own way of classifying tumors. All malignant tumors are not cancers. But the subject is considerably mixed in the minds of many.

Dr. Bremer thought the pith of Dr. Hughes' question was in regard to the tumor diathesis. He did not believe in such a thing. It has never been satisfactorily established. It takes a lowered state of vitality locally to promote the appearance of these tumors. If we look at the most frequent form of carcinoma (in the female breast) we find that that organ is most frequently exposed to pressure, etc. The cervix uteri is also the subject of much maltreatment. Epithelioma of the lip is attributed to clay pipes. In these cases it is the lowered vitality of the parts which gives a chance to misplaced embryonal tissues to grow. Whether a gumma is to be considered a tumor or not, depends upon individual taste. Some pathologists classify gummata, lupoid tumors, tumors of farcy, actinomycosis, etc., as granulomata. All these tumors are due to a specific virus.

Dr. Gregory has never seen so much vigor in any living thing as in a sarcoma. The forces are misdirected but the vigor is there. He has seen one grow as large as a fist in

two weeks. Every agency which irritates produces an inflammation; and whenever it produces anything else, something must be conjoined to it. We know that carinoma in a child is a curiosity.

Dr. Green asked what determines that peculiar constitutional condition we observe in connection with tumors? We did not know what goitre was at first, now we know that it is caused by a parasite. This was once mysterious bnt it is so no longer. He thought the time was not far off when we would find that these malignant tumors are caused by parasites which enter the body in some manner.

Parturition in the Hypnotic State.

Dr. Mudd read a letter from Dr. Blickhahn, at present studying in Germany, describing a case of labor in the hypnotic state. The girl, a primipara, was hypnotized with the bright end of a speculum or the mercury bulb of a thermometer. All the stages of hypnotism could not be produced, the state of somnambulism not being induced. She was hypnotized a number of times when, in October, labor pains, of which she complained, came on. The membranes were punctured, but the os not being fully dilated, she was hypnotized. She, after some time, fell asleep; when the pains came on there were convulsive movements of the left arm and leg, then the head moved, the lips puckered, the forehead wrinkled, the sight became affected. She then drew up her legs and heels, and during pains, bore down decidedly. All this time she was unconscious. The bearing down was reflex. The pains increased in strength and length. The child was soon born. After five minutes the uterus acted decidedly again, and the bearing down was marked. The placenta was soon expelled together with some 300 grams of coagulated blood in the membranes, that being the extent of the entire hemorrhage. She was changed to another bed and awakened. She said she felt well but sleepy. She knew absolutely nothing of what had transpired and would not believe that she had given birth to a child. She was surprised at the smallness of her abdomen and was finally persuaded into a belief of the true state of affairs. The remarkable points in connection with this experiment, are the decided bearing down and the shortening of the process of parturition by means of the hypnotism.

—Dr. Edson, of the New York Health Department, has had some bright red stockings for children examined. The analysis revealed arsenic and antimony, both poisonous to the skin.

CHICAGO MEDICAL SOCIETY.

OFFICIALLY REPORTED FOR THE REVIEW.

Stated meeting held November 16, 1885. The President, C. T. Parkes, M. D., in the Chair.

A Report Embodying Two Hundred Cases of Tonsillitis,

was the title of a paper read by Dr J. M. G. Carter, of Waukegan, Illinois.

After detailing the treatment which had been employed in the cases, the author advanced the theory that since the great majority of the cases occurred during March, April and May, when northeast winds prevailed, carrying landward more moisture from Lake Michigan, these winds must be one of the causal factors in the production of tonsillitis. Also, the test for ozone during these months showed a greater percentage of ozone in the atmosphere. Another fact was noticed, that a great many cases occurred in rheumatic patients. The author was of the opinion that the epidemic of cases detailed was due to the damp northeast winds, containing an excess of ozone, and to unusually disturbed electrical conditions of the atmosphere. The author grouped the two hundred cases, without classifying them, into cases of simple, diphtheritic or scarlatinous tonsillitis. He mentioned, however, the fact that cases of simple tonsillitis were often accompanied or followed by attacks of diphtheria or scarlet fever among other members of the family.

Discussion.

Dr. F. O. Stockton said: We have tonsillitis in nearly all the eruptive fevers, usually following, and occasionally preceding them. The author refers to cases having diphtheritic patches on the tonsils; I think he has confounded these diphtheritic cases with what we specialists call follicular tonsillitis. It is not a diphtheritic condition at all, but resembles it very greatly, so that in a differential diagnosis these cases are very often confounded. In regard to the temperature going up to 104°, it is my experience, and that of authorities such as Cohen, Bosworth and Robinson, that it ranges from 102 to 103°, seldom more than 103, usually 102°. In the treatment of tonsillitis I have never found a gargle effective. In diphtheria or acute tonsillitis you can give chlorate of potash, or any other drug, but where a man has a pain in the angle of his jaw and a throat so sore that he cannot swallow, if you can get him to gargle you

can do more than I can. Ice held in the mouth until it dissolves is good, also powder or tincture of guaiac and tincture of aconite internally, but never give more than three doses of aconite in one day. Occasionally, if you see a case is going on to suppuration, use hot applications externally and internally in the way of steam, otherwise never use hot applications. My idea is that heat promotes congestion more than cold, and my experience is that where cases are treated, some with cold and others with hot applications, that the cold in connection with other treatment, guaiac and tincture of aconite, is most successful. We ought to settle this question of tonsillitis. What is acute tonsillitis, and is there such a thing as acute tonsillitis? To me it is a misnomer. The abscess seldom forms in the tonsil, it is behind it in the loose connective tissue; and in opening it we cut behind or above the tonsil.

Dr. C. W. Earle said: I would like to ask Dr. Carter if there was any appearance of contagion in any of the cases?

Dr. J. M. G. Carter said: Frequently the disease will attack everybody in the family, old and young, and just as frequently but one or two in the family have the disease. It sometimes appears to be contagious.

Dr. G. C. Paoli said: Tonsillitis is a very common disease in Chicago, especially among children. It is certain that there are different degrees of tonsillitis; tnere are light cases in which very little medicine is required, and again there are strumous children who are very susceptible to the changes of weather, and in inclement weather get wet and have tonsillitis. In some cases one tonsil is affected, in others both, or the pharynx. There are grave cases that cannot be cured in one week, or two, cases that develop into hypertrophy of the tonsils. In regard to treatment, a light case does not require ice, and a person with malignant scarlatina with tonsils affected would take cold from the application of ice. We should discriminate, and in malignant cases where the tonsils are inflamed should be caseful about applying ice. In the use of aconite with children we should be very careful, as in fever it diminishes the circulation, and I would not recommend its general use unless you can see the patient two or three times a day and watch the effect of the aconite. A simple thing to use is a little potash with tincture of iodine. In scarlatina complicated with diphtheria it is better to use very little medicine. I have nothing against chlorate of potash. However I read a very interesting paper by a professor in New York, his name I do not now remember, who says that observation has shown that chlorate of potash has often produced nephritis, and I think great care should be taken in its use.

Dr. R. Tilley said: One of the points brought forward by the author is the use of kerosene. I remember that Besnier, a professor of skin diseases in Paris, says that kerosene is used extensively by the laity, but he regards it as a dangerous remedy in the hands of people generally, and a very inefficient one; he was speaking, it is true, of the treatment of itch. I protest against the use of the terms ozone and electrical conditions of the atmosphere; we know practically nothing about either.

Dr. J. M. G. Carter said that he was obliged to leave in order to catch the train for Waukegan, and expressed regret that he could not remain and reply to the criticisms upon his paper.

Dr. W. E. Quine said: An interesting feature of the experience embodied in the paper is the obvious failure of the writer to differentiate infectious from non-infectious tonsillitis. I presume it is a matter of familiar observation to all who have been long engaged in the practice of medicine that many cases of follicular tonsillitis occur which baffle the judgment of the most experienced physician to determine with precision whether they are infectious or non-infectious. I have often seen in my own practice cases of this kind. Often one member of a family, probably the first one attacked, exhibits plainly marked features of simple follicular tonsillitis, and those of the family who sicken afterwards exhibit the phenomena of diphtheria, or less frequently, scarlatina. The text-books do not give a reliable guide to diagnosis, and if any of my colleagues know of means by which cases of this kind can be differentiated with certainty we would like to know them.

One gentleman has alluded to the opinion of an eminent professor in New York. I remember that Jacobi, who is perhaps the person referred to, in a recent article maintains very vigorously that many cases of so-called tonsillitis are in reality immature cases of diphtheria, and he stoutly maintains that there are many cases of diphtheria never having patches in the throat, and where the patient walks on the street and communicates the disease freely to those with whom he comes in contact.

Dr. Sarah Hackett Stevenson said: Last February I was called to see a lady who had frequently suffered from tonsillitis. She was "subject to quinsy." I suggested that her child should not be kept in the same room with her, as the case seemed more than ordinarily violent, and gave the usual treatment

for quinsy; the disease went on to to suppuration. I was called out of the city after one of the tonsils had discharged, and during my absence, about five days, her child was attacked with malignant scarlet fever, and died before my return. This is the first case in which I ever suspected that a benign form of tonsillitis might reproduce a malignant form. Since then I have watched all cases, however simple they may seem.

Dr. C. T. Fenn said: I think we should all take an interest in this work, especially in the most practical suggestions of Dr. Earle. The fact is, that to regard these cases all as malignant, is to be on the safe side. A case of simple tonsillitis has a tendency to develop into diphtheria. I protest against the folly of attempting to distinguish between mild and simple cases of tonsillitis and diphtheria. In regard to treatment, I have no use for gargles or washes; I will not force open the mouth of a child and cause it to cry, but steadily and persistently, every fifteen minutes, I will give such medicine as the child will pass over the tonsils when swallowing.

Dr. J. S. Knox said: I regret that the paper is so general, the author evidently grouping together a variety of cases of tonsillitis of different classes. There is undoubtedly an inflammation of the tonsils due to eruptive diseases, such as small-pox and scarlet fever; and there is a tonsillitis which is purely catarrhal, and another which is purely due to diathesis and which is rheumatic or syphilitic. The treatment differs accordingly. I think there is an error as to the valne of chlorate of potash; better results will be obtained from the use of bicarbonate of potash, the value of the drug lying in the fact that it is a potash salt, and I think that the bicarbonate of soda would be still much more efficient. Where the hyposulphite of soda would do good, the salicylate would do more.

Dr. J. J. M. Angear said: It seems to me that if we remember that there is such a thing as resistance, the absence of which is susceptibility, it will explain some, if not all, of these difficulties. We can readily imagine a robust, healthy child with strong resistance to morbid influences, and especially that of diphtheria, on exposure would have simple tonsillitis (abortive diphtheria); but suppose that his brother, with strong susceptibility, is exposed to the same morbid influences, he will develop a case of undoubted diphtheria.

In diphtheria, we have an inflammation with fibrinous exudation which breaks down the mucous cells and forms the diphtheritic patch; this furnishes a nidus for the micro-organisms, which go on secreting or fermenting their peculiar virus, the absorption of which contaminates the whole body, and now we have a constitutional disease. Will not this explain a large number, if not all, of those cases where four or five children in a family are taken down, apparently with simple tonsillitis, and some one child that has not their resistance is attacked with undoubted diphtheria. In this house we have tonsillitis, and our neighbor severe diphtheria. By remembering these pathological facts, we shall see that it is, or it may be, all the same morbid influence here and yonder,—here, recovery in a few days; there, death in a few hours.

Dr. F. O. Stockton said: In acute tonsillitis I think it will be found that ice is the proper treatment in the first stage, before suppuration has begun. It is very seldom that pus is located in the tonsil, it is behind the tonsil. With regard to a differential diagnosis between diphtheria and tonsillitis, there is almost always in diphtheria a regularly graded rise in the temperature; in acute tonsillitis, so-called, or follicular, the temperature is not regular, it rises at a jump, the attack comes on suddenly, begins with a chill immediately followed by a fever; in diphtheria there is a gradual rise, going up one day, dropping the next. I think if we took a record of given cases of diphtheria and tonsillitis, we would find that a regular rise in temperature in diphtheria occurs as in the essential fevers.

CORRESPONDENCE.

NEW YORK LETTER.

New York, Dec. 8, 1885.

Editor Review: At the last meeting of the County Medical Society a discussion arose on the following question: "Shall the medical profession be subjected to a penalty of five hundred dollars for reporting contagious diseases to the Health Department of this city?" The circumstances giving rise to the discussion were these: A member of the society, Dr. Purdy, had reported a patient to the health office as having varioloid. An inspector from headquarterc agreed in the diagnosis and the patient—a woman engaged in business—was removed to the isolation hospital. She was detained only a few days and then learned that some of the hospital physicians doubted if she was suffering from varioloid. Thereupon she sued Dr. Purdy for ten thousand dollars. The jury gave her five hundred dollars damages in response to her allegation that a mistake in diagnosis had been made and that in consequence of her removal and confinement her

business had been destroyed. The matter was brought before the Society in order to appeal—through its counsel—from the verdict and if possible secure its reversal. On the motion of Dr. Agnew the matter was referred to the Comitia Minor with power to act.

At the same meeting the recently re-elected President, Dr. Daniel Lewis, delivered the annual address on "A Profession or Trade." He deplored the readiness of many physicians to append their names to testimonials for quack medicines. He advocated a classical education for students in medicine and said they should be compelled to pass five years at a medical college and then be subjected to a State examination—which should include papers, oral questions, operations on the dead body and treatment of patients under the eye of the examiner before receiving a diploma. He deplored also the present system of endorsing medical diplomas.

Dr. Milton J. Roberts read a paper on "The Mechanical and Operative Treetment of Knock-knee and Bow-leg Deformities," and exhibited some new apparatus recently devised by himself for the treatment of these conditions.

For the past few months great interest has been manifested at all surgical gatherings in discussion over the treatment of fractured patella by wiring. At a recent session of the Section in Surgery of the Academy of Medicine, a committee was appointed to investigate the subject, collect evidence, and report at some future session.

The recent division of the Academy into Sections has greatly increased the amount of work done by that body. At the last meeting of the Section in Pediatrics, Dr. Joseph E. Winters read a paper on "Diphtheria and its Management." A discussion followed on the alleged "Identity between Diphtheria and Membranous Croup."

Dr. Chas. T. Poore recently read a paper before the Surgical Society on "Removal of the Tarsal Bones."

One case of yellow fever was recently brought to Chamber Street Hospital from one of the West India steamers. He was in a comatose condition and died before he was able to talk. An autopsy confirmed the correctness of the diagnosis.

Dr. Ellsworth Eliot has recently resigned the office of Registrar of the College of Physicians and Surgeons which he had held for many years. His successor is Dr. Geo. L. Peabody. The Alumni Association of the college are raising an equipment fund for the laboratory to be started in the new college building. A donation of five thousand dollars was recently received from Mr. Morris K. Jessup, a wealthy banker of this city.

A new ward has recently been opened for the treatment of children's diseases in the hospital connected with the New York Post-Graduate School. It is to be in charge of Dr. Sarah J. Mc Nutt, one of the lecturers of the college.

The Society for Instruction in First Aid to the Injured has resumed its classes for the coming session. The amount of good done by those who have been the recipients of its teachings has been very great. The course of lectures consists of five in which are given popular directions for caring for the sick and injured till medical aid can be summoned.

At the last meeting of the Pathological Society Dr. Van Santvoord presented specimens illustrating carcinoma of the cervix with infiltration of surrounding tissues. Also tubercular ulcers of the pharynx (there being tubercles in various viscera) and hog cholera. Dr. Delavan read a clinical history of the case of Panum, President of the last International Congress at Copenhagen, who died of rupture of the heart. A very interesting specimen was presented by Dr. Boldt on behalf of a candidate. It illustrated cysts of the capsules of the kidneys—both organs being involved. The patient—a woman—began to complain three months before her death of pain in the abdomen. She was a corpulent person and suffered from edema of the lower extremities reaching to the knees. In the vagina were evidences of a malignant growth. There was a sense of hardness in the right hypochondriac region—dullness and evidences of ascites. Later there was edema of the subcutaneous abdominal tissues. The urine was negative. On approach of death there was great thirst, dryness of the mucous membranes, hoarseness and dyspnea. On opening the abdomen post mortem a cystic tumor was pressing the liver upward. The intestine was adherent to the growth. Tapping withdrew two quarts of a bloody fluid containing flocculi of lymph. The tumor enclosed the kidney proper. The latter was markedly amyloid, enlarged with distended calices and thickened cortex. The left side contained a similar neoplasm. On being opened before the Society the tumor was found filled with a gelatinous fluid mass. Dr. Mary Putnam-Jacobi asked if this material could not be colloid in its nature and the case one of colloid cancer in view of the growth in the vagina. Dr. Boldt thought the symptoms would negative such a proposition. Dr. Prudden said the gross appearance of the material resembled colloid matter but that careful examination would be necessary to settle the nature of the case. It might be a peri-nephritic abscess which had undergone degenerative changes.

J. E. N.

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LARYNGEAL ANALGESIA.

Brown-Sequard has published in the Compt. rend. de l' acad. des Sciences, 1885, No. 22, the extradordinary general analgesic results that follow local irritation of the mucous membrane of the larynx. He claims that such irritation is followed in man and beast by a considerable reduction of general sensibility of several hours duration, without any impairment of consciousness or intelligence, or of the special senses, or voluntary motion.

It is about three years since Brown-Sequard first gave out that such irritation of the upper laryngeal nerves brought about an inhibitory influence upon certain nerve-centres, and that, according to the measures employed, the whole body, or just one side of it, could be peculiarly influenced. The publication above referred to contains his investigations since and up to date.

His experiments were conducted upon nine monkeys and forty-three dogs; in the former analgesia was established especially easily and permanently. In order to meet with best success the mucous membrane of the larynx should be dealt with; however, irritation of neighboring tissues is followed by like, though not so pronounced, phenomena.

The irritative stimulus is best made with fumes of chloroform, or of carbolic acid. Of course none of the chloroform should enter the lungs, because sleep would then be induced and the analgesic action of the laryngeal nerves become lost in this general anesthesia. The desired effect was also obtained by injecting 12-15 drops of a 10 per cent solution of cocaine into the mucous membrane. Other, but not so effective, means to this particular end are galvanization of the superior laryngeal nerves, or of the whole larynx, cauterization of the membranes with nitrate of silver, etc.

If now such an impression has been made upon the locality indicated for one, two or more days, then sensibility of the surface of the extremities or the trunk has vanished. Wounds that have been made before the manipulation lose their painfulness; the infliction of wounds subsequent to the induction of this peculiar state is not felt, and such wounds may heal and cicatrize without a single pang, during the 8 to 10 days needed for repair.

In some instances the analgesia was so perfect that large nerve-trunks could be cut, the most painful escharotics applied and powerful galvanic currents used, without evincing any pain or suffering.

In the greater number of instances this freedom from pain is most pronounced 15 to 20 hours after the local irritation.

Strange to say, tactile sensibility is preserved and the sensations experienced by muscular movements, by moving of the joints, etc., is preserved.

Brown-Sequard states that it is difficult to accomplish perfect results of this kind in man. Upon his animals he had recourse to tracheotomy in order to prevent the introduction into the lung of the vapors employed. In man he directed that a deep inspiration be made; the first two-thirds of the act of inspiration fresh air was inhaled; at the close of the act carbolic acid vapors were inhaled. Thus the vapors were brought into contact with the larynx, and did not penetrate into the lung deeply. At first the glottis closes against the vapors, but as the local sensibility becomes lost, a more free respiration follows. In some individuals the effect is soon and easily accomplished. The inhalation of carbolic acid

must be continued for twenty minutes. Complete analgesia of forty hours duration was so afforded. Pain of the most various description disappeared for two days or more, and as stated above, with no appreciable interference with the functions of other nerve centres.

It is certainly in order, with such statements coming from so high an authority as Brown-Sequard, to give the local application of solutions of muriate of cocaine to the larynx an extensive trial in order to note its effects as to general analgesia.

All that is really good in cocaine lies in its local, anesthetic effects. And even these, it must be admitted, notwithstanding we read so much of the marvellous influence as a topical application upon every mucous membrane that can be reached, are very dubious. A true, lasting, unmistakable anesthetic effect has been established only for the conjunctiva and the larynx. Trial must show whether the latter can be treated with solutions of innocent concentration and the above analgesic results follow. We are learning what a dangerous drug it is, and that even its local use must be a careful and guarded one.

Indications in Intestinal Obstruction.

Two cases of intestinal obstruction due to intestinal tumors combined with intussusception are reported by Fleiner in Virchow's Archiv. Both cases occurred at Heidelberg, and were operated on by Prof. Czerny. The details of the cases are of considerable clinical interest and Czerny adds his suggestions regarding the proper procedure in cases of internal strangulation.

The first patient, a physician 45 years of age, had developed, together with an adenocarcinoma of the ileo-cecal valve, an invagination of the ileum into the colon.

The strangulation was partial and chronic, but such considerable stenosis ensued that laparotomy was made, with reduction of the invagination and resection of the carcinomatous gut.

Peritonitis carried the patient off on the following day.

The second patient, a baker, 52 years of age, was seized suddenly with all the symptoms of ileus. He mended and Czerny saw him six weeks after the acute attack. A freely movable tumor was found close under the right costal arch. Czerny diagnosed floating kidney with symptoms of strangulation as a possibility, but thought it more probable that an intestinal tumor with intussusception was the trouble.

That such was the case laparotomy showed. The ileum had slipped into the colon up to the flexura coli dextra. The invagination was easily corrected; and at the end of the involved section a round tumor with a central umbilication was found, a scirrhus. The tumor was cut out together with a broad healthy margin and the gut stitched up. The patient was discharged on the 28th day, and presented himself four months after in excellent health.

Czerny remarks in connection with these cases that it is an error to suppose that in all cases of internal strangulation he prefers to open the belly by a wide incision. He gives it as his rule that laparotomy and search for the obstruction should be made only then when the patient is still in good condition, and the abdomen is soft and yielding, so that, after narcosis, the site and probable nature of the trouble can be made out. If, however, the patient is collapsed, the belly ballooned, and nothing can be made out respecting place or nature of the trouble, then the operation for artificial anus is preferable.

Nephrectomy.

In the American Journal of the Medical Sciences for July, 1885, Samuel W. Gross discourses upon "Nephrectomy and its Indications and Contra-indications." Paul Gueterbock takes up this essay, together with other publications of recent date on subjects relative to this, and gives his review thereof to the Centralblatt fuer die med. Wissenschaften, Nov. 21, 1885.

Gross publishes thirty-four cases of total removal of the kidney that have not heretofore been reported in current prints, and thereby increases the number of detailed and recorded cases to 233. Of this number 104 (44.63 per cent) died. Of the total number 111 were operated by lumbar incision, 120 by laparotomy, and 2 cases are not defined as to the operative measures. Of the cases operated by lumbar incision, 41 (36.93 per cent) were lost; of those dealt with by laparotomy 61 (50.83 per cent) terminated fatally.

If from the total number operated 33 cases be subtracted in which disease of the ureter, traumatism or floating kidney indicated the removal of organs otherwise healthy (of this number 19 lumbar removals with 4, and 20 laparotomies with 8 deaths) and five cases in which a kidney was removed incidentally during the progress of other abdominal operations, there remain 92 lumbar operations with 37 fatal issues, and 95 laparotomies with 48 deaths. It appears from the report that the method of removal by laparotomy has shown better results in tuberculosis of the kidney only. However, in the whole list only 20 such pathological conditions demanded operation. Therefore, it may be asserted as a general conclusion, that lumbar nephrectomy is less hazardous than abdominal.

Regarding the several direct causes of death and their relative consequence upon one or the other mode of operation, the annexed table is given.

Causes of Death	Abdominal Section		Lumbar Section.	
	Number.	Per cent.	Number.	Per cent.
Shock	20	32.79	16	40.0
Peritonitis	13	21.31	1	2.5
Peritonitis septic	8	13.11	0	0
Uraemia	4	6.55	2	5.0
Exhaustion	4	6.55	4	10.0
Septicemia and Pyemia	3	4.91	7	17.5
Anuria	2	3.27	6	15.0
Infarction; Embolism	2	3.27	0	0.
Hemorrhage	4	6.55	0	0.
Secondary Hemorrhage	1	1.63	1	1.2
Suppuration of the remaining kidney	0	0.	1	2.5
Uncontrollable vomiting	0	0.	1	2.5
Cramps and spasms	0	0.	1	2.5
Unknown	0	0.	1	2.5

This table shows that peritonitis and septic peritonitis are unknown as sequels of lumbar nephrectomy. But pyemia and septicemia are more frequent than after abdominal nephrectomy. Hemorrhage and embolism also appear less frequently after the lumbar than after the abdominal procedure. Precise knowledge of the condition of the other kidney appears more easily obtainable by abdominal section.

Gross summarizes as follows:

1. Lumbar nephrectomy is the safest operation.

2. Nephrectomy is indicated primarily by: a, sarcoma in adults; b, benign growths at any period of life; c, the early stages of renal tuberculosis; d, rupture or fistula of the ureter.

3. Nephrectomy may be executed, but only after failure of all other remedial efforts on account of: a, rupture of the kidney; b, prolapse of the kidney from a wound in the lumbar region; c, laceration of the kidney or ureter; d, suppuration of the kidney; e, hydronephrosis and cystic degeneration; f, neoplasm; g, painful, floating kidney.

4. Nephrectomy is positively contraindicated in: a, sarcoma of children; b, carcinoma at any age; c, far advanced tuberculosis.

Gueterbock adds the histories of cases operated upon by George Elder and E. Sonnenburg.

Prevention of Tinnitus Aurium.

Dr. E. J. Beall, of Fort Worth, Texas, writes us:

For ten years or more I have been in the

habit of combining ergotine with quinine with the view of moderating its effects upon the brain. The idea was suggested by noticing the theory of Bichat upon the induction of tinnitus. Lately I have been in the habit of adding cocaine to the articles mentioned for the purpose of preventing the nausea induced sometimes by both quinine and ergotine.

The following will indicate proportions:

℞ Cocain. hydrochlorat., - - gr. j
Ergotini, - - - - - - - gr. vj
Quiniæ sulphat., - - - - ℈ j.

M. Ft capsules No. V.
S. As directed.

Fracture of the Fifth Cervical Vertebra.

The following interesting notes have been sent us by W. C. Bunce, M. D., of Oberlin, O.:

"Seeing in the 'Review' for October 24 the report of two cases of fracture of the spine with recovery I take occasion to report a similar case occurring in my own practice.

M. S ———, school-boy fifteen years of age, while with other boys annoying a workman, was seized by the workman, in a half playful manner, and thrown head first onto a frozen sand pile, where he lay for a moment partly unconscious, but on recovering, while still lying where he had fallen, grasped his head with both hands, saying that his neck was broken, and in this way supporting his head with his hands was carried to his home only a few feet distant.

Upon my arrival a few minutes afterwards I found him sitting in an old-fashioned high-backed rocking chair, with his head leaning against the back of the chair, and supported on either side by his hands. There was extreme pallor of the face, and complaint of numbness, or a creeping sensation of the extremities, as he described it. Upon an attempt to rotate the head a slight crepitation could be plainly heard, a fracture of the fifth cervical vertebra through the pedicle and spinous process was easily discovered. A suitable suspensory apparatus was improvised and a plaster splint was applied extending from the angle of the inferior maxilla on one side around the occiput to the angle of the opposite side, resting upon the shoulders below, leaving two inches in front not covered by the plaster splint. A piece of thick book board was then soaked in hot water until pliable, and moulded to the chest in front extending up to and supporting the chin; a roller was then passed twice around the neck thus holding the head in a perfectly immovable position. This was worn for six weeks, after which time it was removed, the patient feeling no inconvenience except at first there was not quite free movement of the head backward.

I was glad to see the report of the cases by Dr. Strawbridge, as it has been said by some that it was impossible to have fracture of the neck with recovery.

In 'Holmes' System of Surgery,' Vol. I, page 807, we find: 'If fracture of the spine (attended with crushing of the cord) should occur above the level of the fourth cervical vertebra, that is, above the origin of the phrenic nerve, it may be considered that instant death will ensue.'

Hamilton—Fractures and Dislocations—page 142, gives a case of fracture of a cervical vertebra through the ring with recovery. In the surgical volume of the "History of the War,' part first, pages 430 and 431, we find several cases reported of recovery where there had been extensive fracture of both body and ring of the cervical vertebra with suppuration and discharge of small pieces of bone."

Evolution in Medicine.—The Bowman lecture on Ophthalmology and Diseases of the Nervous System was delivered this year by J. Hughlings Jackson, physician to the London Hospital and to the Hospital for Epilepsy and Paralysis. It is of such a philosophic tendency that the British Medical Journal analyzes it in the following words:

"The influence of the theory of evolution

—or perhaps it would be more correct to say of the mode of thought which has found expression in that theory—upon scientific progress in this country, has been very remarkable. No department of science, from astronomy to psychology, has escaped its transforming touch; it has proved itself one of those large hypotheses which mark an epoch in the history of science. Medicine, which is rather a complex of sciences than a science, is at length beginning to feel the impetus in various departments; and the Bowman Lecture this year is a striking example of the way in which a keen observer and careful thinker, thoroughly imbued with the evolutionary principle, looks at the facts of a certain department of pathology. The main object of the address was to show forth the necessity for differentiation of work, but differentiation combined with co-operation. In the progress of evolution, said Dr. Hughlings Jackson, four stages' or degrees were to be discriminated; and scientific investigation must be governed by this condition, and can, therefore, be regarded as the product of the interaction of four influences. The advance of science depends upon increased differentiation of work and definiteness of observation combined with increased integration of knowl' edge and co-operation of workers. Numer. ous illustratins of the advantages to be obtained from this integration and co-operation were drawn from neuro-pathology; but the greater part of the lecture was devoted to an exposition of the pathology of epilepsy, which was chosen because it presented the greatest complexity of symptoms. For the full comprehension of true epilepsy, the co-operation of the physiologist, the alienist physician, and the ophthalmic surgeon, with the neurologist was required. "Epilepsy," said Dr. Hughlings Jackson, "is a disease of the organ of mind—that is to say, of the highest and most complex centres;" and the organ of mind, he added, was nothing else than a series of centres representing (or co ordinating) all parts of the body. He advanced the hypothesis that the whole nervous system was a sensori-motor system, in which all parts of the body were represented at three different levels or stages of evolution, integration, and intercommunication increasing from the lowest to the highest level; so that, in the highest centres, larger areas of the body were brought into connection with each other, while at the same time function was more differentiated.

Tabes dorsalis, Graves' disease, and diphtheritic paralysis, were given as good examples of diseases in which the centres at the lowest level of evolution might be affected along their whole extent. In the last-named affection, for instance, every organ, from the ciliary muscle of the eye to the muscles of the feet, including the thoracic, abdominal, and pelvic viscera, may be involved. Epilepsy, being a disease of the organ of mind, is at the opposite pole; and Dr. Jackson set himself to show that that disease presented an universal symptomatology, or, in other words, that every department of the nervous system is involved. In epilepsy every muscle, and in the 'warnings' of epilepsy every sensory area, from the nose (first cranial nerve) to the feet might afford symptoms; and after the fit there is universal paralysis of both animal and organic parts; and not only mental paralysis (coma, unconsciousness), but paralysis to a slighter degree of the lower centres also.

Sir William Gull, after the lecture, said that Dr. Hughlings Jackson was the greatest living worker, as he was also the most honest and most disinterested, in the field of neuropathy; certainly, he has given us, in his Bowman lecture, as he never fails to do in all his public utterances, much food for thought, and many suggestions to guide future obserservation and research. But he is not a prophet who prophesies smooth things; he sees and feels the complexity of the problems which he attacks, and he takes no pains to hide the difficulties which exist, both in the facts themselves and in the hypotheses by which it is attempted to explain them. Sir William Gull also said that Dr. Jackson had made his hearers feel that they had been all unprofitable servants, the field of work

glanced over was so large, the workers so many, but the work so unmethodical, desultory and scattered. Every observer may, as Mr. Macnamara well said, make definite accurate observations in his own department, though it was reserved for the few to analyze the observations and combine them as the Bowman lecturer had done this year, stringing them on the serviceable thread of a convenient working hypothesis."

Strangulated Umbilical Hernia.—The Boston Medical and Surgical Journal writes: The attention of the profession has of late been called anew to the operative treatment for strangulated umbilical hernia by the report of two cases by Mr. Clement Lucas at a meeting of the Clinical Society of London, held October 6th. In this report Mr. Lucas endeavors to account for the high rate of mortality hitherto following instrumental interference, and to lay before the notice of the profession the most rational means for reducing it. He strongly advocates the removal of the sac, and the suturing of the patulous umbilical ring; and this not on the ground of safety alone, but for the incidental advantage to the patient of obtaining a radical cure. He regards "the sac itself as a danger from its badly nourished texture, its tendency to suppurate or slough, and its liability to collect discharges and guide them into the peritoneal cavity," and strongly advises that that useless and dangerous piece of tissue be removed. His two cases certainly furnish strong evidence in favor of the method. The first case was a women of forty-eight, who was also sufferiag from renal dropsy in an advanced stage. The taxis having failed, the sac was laid open freely, when fluid escaped and a long coil of purple intestine came into view. It was found impossible to reduce the hernia, even after the constriction was divided, until a large quantity of ascitic fluid had been drained off through the wound. The sac was then cut away and the margins of the umbilical opening brought together with three stout catgut sutures passed through to, and including, the peritoneum. For the skin wire sutures were used. The recovery was uninterrupted except that a slight suppuration was caused by one of the catgut sutures, which came away on the fifteenth day. Two months later there existed no tendency to umbilical protrusion.

The second case was a woman of fifty-two years extremely fat and flabby. Taxis having failed, a four-inch vertical incision was made over the upper part of the tumor, the sac was laid open, the stricture divided, and several feet of dark colored intestine returned. There was in this case an omental sac lining the one of peritoneum and in parts adherent to it. As much as possible of sac and omentum were removed, and the edges of the umbilical opening brought together with catgut as in the first case. In three weeks the patient had recovered from the operation. In both cases carbolic spray and antiseptic dressings were used.

In the subsequent discussion the weight of opinion was in favor of the operation, especially in cases presenting unusual difficulties. The procedure had been adopted several times with success by other surgeons present at the meeting.

The interest shown in the subject induced Mr. Rivington, of the London Hospital, to report in the Lancet of October 24th, several cases of hernia, which had been treated essentially in the same manner as that advocated by Mr. Lucas, and among them two cases of strangulated umbilical hernia. The results in both were perfectly satisfactory. Mr. Rivington affirms that the removal of the sac or omentum after the bowel has been reduced cannot, in most cases, add appreciably to the risk of an operation.

In the issue of this Journal, for October 16, 1884, Dr. A. T. Cabot urged the importance of removing the sac and suturing together the peritoneal surfaces around the ring under strict antisepsis, so as to shut off the abdominal cavity from any suppurative action which may take place in the wound. He there says that the "wound left by an operation done in this manner for umbilical hernia differs in no essential particular from

the simple incised wound of an ovariotomy," which almost invariably heals readily, the peritoneal surfaces, when snugly approximated, cohering within twelve hours. The case which he records recovered from the operation, but died about three weeks afterwards from causes not directly traceable to the operation, but to her own indiscretion.

In the same issue of the Journal Dr. H. L. Burrell reported a case, in which he performed this operation on a women of fifty-two years, weighing 230 pounds. Owing to the great thickness of the abdominal wall it was necessary to make a vertical incision reaching from the top of the tumor to a point four-fifth inches up the linea alba—practically an abdominal section. The sac was excised and the wound brought together by deep wire sutures which included the peritoneum. A perfect cure resulted.

Judging from the results of all cases published, and from the opinion of competent surgeons, as well as from the reasonableness of the operation itself, it would appear that this comparatively new method is to be recognized as a distinct advance in surgical science, and as applicable to all cases of strangulated umbilical hernia, which present unusual difficulties in the way of reduction. The principles to be borne in mind are removal of the sac, ligature of the ring by stitches passing through the peritoneum, and strict antisepsis.

The Origin of Cancer in Chronic Inflammatory Conditions of the Mucous Membranes and the Skin.—We note in an exchange a translation of a review written by Kramer in the Centralblatt f. Chirurgie on a late issue, No. 257, of Volkmann's Sammlung Klinischer Vortraege. "Dr. K. Schuchardt presents an interesting contribution to the question of the relationship of cancer to chronic ephithelial irritation, especially in the form of psoriasis of the mucous membrane, paraffin itch, and senile seborrhea, the microscopic details of each being carefully considered.

In the first part of the essay, after referring briefly to the history of two cases of sarcoma (of the orbit and of the head of the tibia) following traumatism, the author reports four cases of psoriasis of the mouth, and especially of the tongue, which terminated in carcinoma of the mucous membrane. In a spyhilitic subject presenting the same condition, cancer did not appear. Three of the former cases were inevitable smokers. In another case an epithelial cancer developed from a psoriasis præputialis of six months standing. The patient had a tight phimosis. Microscopically, the mucous membrane affected by psoriasis showed inflammatory infiltration of the superior layers of the corium, and in the epithelium numerous nuclei in a state of active proliferation; in the superficial cells, under the horny layer, elaidin was detected.

The second part of the paper reviews briefly the reported cases of chimney-sweeps' and coal-tar and paraffin workers' cancer of the scrotum, and reports six cases of paraffin cancer (one of which had been previovsly communicated by Tillmann). Here also did the carcinomatous degeneration proceed from long-continued irritative conditions of the skin of the body or of the scrotum alone in the form of acne, infiltrations, exanthems, scaly and scabby formations, warty excrescences, or seborrhea, the essential phenomena being more rapid formation of the epideermis and increased activity of the sebaceous glands. In four cases it terminated in cancer of the scrotum, with enlargement of the inguinal glands and speedy return after operation. In two cases cancer attacked the upper extremities. In the last-mentioned, Schuchardt examined the portion of the skin affected by paraffin-dermatitis and found a typical growth of the lowest epidermic layers, at the basis of warty formations epithelial nests, (schichtungs-kugeln) in the neighborhood of which cells were infiltrated with elaidin, dense crowding of the hairsheaths with non-nucleated scales, and small-celled infiltration of the cutis. As an especially predisposing condition to cancer of the face was considered seborrhea senilis. This pecular affection, as

is well known, is characterized by the appearance of usually multiple, circumscribed, prominent, yellow or brown, fatty, scaly accumulations. It especially affects the skin of the face, but is also encountered on the thorax and neck, rarely on the extremities; almost exclusively observed in old people of the lower class. Microscopic examination discovered nothing abnormal in the sebaceous glands, while a very significant change was detected in the superior layers of the epidermis and in the hair-sheaths, terminating in partial corneous desquamation. The hair-follicles were often found entirely filled up with newly-formed epidermic scales. Here and there it was demonstrated that the secretion might have been retained, for sometimes at the root of the hair large or small drops of fat were visible underneath the fatty accumulation. The same granular fatty deposit was also found between the corneous scales themselves, pressing apart the lamellæ of epidermic growth; finally gaining the surface, it gave the fatty character to the scales.

Especially noticeable was also a marked inflammatory infiltration in the superior layers of the corium, especially in the papillæ. Apparently, want of cleanliness, besides advanced age, exerts an influence upon the origin of this disease. This accords with the predominance of the affection in subjects from the lower walks of life, among whom personal cleanliness is wanting. It is in this fact that Volkmann especially sees the explanation of the tendency to cancer of the face, and his experience harmonizes with this view, for at the most only two per cent of all cases of cancer of the face occurred in the higher classses, who pay more attention to cleanliness. After communicating a few characteristic examples of facial cancer arising from the senile seborrhea (seborrhagische Carcinome), Schuchardt expresses the opinion that at an early period of life acne sebacea and xeroderma pigmentosum may also afford occasion for the development of carcinoma.

A short reference to the prophalaxis concludes the essay. With regard to psoriasis of the tongue and mouth, the application of Pacquelin's cautery is especially recommended."

An Improved Method of Operating for Cleft Palate.—A correspondent writes to The Lancet, (N. Y. Med. Record) concerning what he considers a great improvement in the operation for cleft palate. Hitherto great difficulty and not a little danger have arisen from hemorrhage during the operation, necessitating frequent and very skilfull assistance, periodical discontinuation of the anesthetic, and distinct intervals in the performance of the operation. In addition to these, other and minor troubles are experienced. All these difficulties may be avoided, and the operation rendered perfectly safe and easy, by the simple process of inversion as applied to the head only. This can easily be attained by bringing the patient's shoulders well up to the end of the operating table, and allowing the head to hang over the edge in the fully extended position. In this position the roof of the mouth would be horizontal or slightly inclined downward toward the operator, who should stand at the head of his patient. The anesthetic is given through the nose by a small tube, and is quite out of the way of the surgeon. Only one assistant is required, who should stand to the left of the operator. In paring the edges no change of hands is required, but the corresponding hand should be used in elevating the tissues of the hard palate and in passing the sutures. Under these circumstances no blood can enter the larynx or esophagus, the palate remains unobscured by blood, and whatever hemorrhage occurs finds its way into the nasal cavities, and at the conclusion of the operation may be emptied by simply turning the patient's head to one side.

Herpes Tonsurans and Favus.—In some stages it is very difficult to distinguish between herpes tonsurans and favus. Dr. G. Behrend, in Berlin (Centralbl. f. Chir., Med. and Surg. Reporter), has recently discovered a method which enables a tyro at once to rec-

ognize which of the two diseases is before him. Behrend employed the reaction, observed by him and by Duckworth, which chloroform produces on hair attacked by trichophyton, the fungus causing herpes tonsurans. Whenever such hair is moistened with chloroform it shows after the evaporation of the drug, which occurs within from two to three minutes, a perfectly white color, while normal hair experiences under its influence no alteration of color whatever. This change of color in the diseased hair proceeds only so far as the fungus had penetrated. The cause of this color-change is to be looked for in the splitting of the hair and in the entrance of air through the clefts in consequence of this splitting. Though the hair is also split in favus, this never happens to such a high degree, and the chloroform reaction has no influence at all on favus. The same remedy cannot be used to determine the beginning of a cure, as the change of color cannot be so easily observed while the hair is in situ, on account of the clear skin; but if a few hairs are extracted and then subjected to the action of the volatile drug, the same alteration of color will at once be observed, if the fungus is still present, while no such change will occur if the trichophyton has been destroyed —a sure indication of the beginning cure, as after the disappearance of the fungus the hair rapidly assumes its normal growth and color.

Cold Bandaging of the Leg in Insomnia. —Dr. von Gellhorn has found the following plan very useful in inducing sleep in persons who suffer from insomnia. A piece of calico, about eighteen inches wide and two and three-quarter yards long, is rolled up like a bandage, and a third of it wrung out of cold water. The leg is then bandaged with this, the wet portions being carefully covered by several layers of the dry part, as well as by a layer of gutta-purcha tissue, and a stocking drawn on over the whole. This causes dilatation of the vessels of the leg, thus diminishing the blood in the head and producing sleep. It has been found by Winternitz that the temperature in the external auditory meatus begins to fall a quarter of an hour after the application of the bandage; the decrease amounting to 0.4° Cent., and the normal not being again reached for from one and a half to two hours afterwards. The author has employed this means of procuring sleep for a couple of years, and finds it especially useful in cases where there is congestion of the cerebral vessels. Sometimes he has found it necessary to reapply the bandage every three or four hours, as it dried.

CONTRIBUTION.

ON THE THERAPEUTICS OF CHOLERA.

BY JOSEPH SPIEGELHALTER, M. D., ST. LOUIS, MO.

Read at the "Verein Deutscher Aerzte."

Our knowledge of the etiology of the infectious diseases has been advanced in a great measure by the microscopic and bacteriological researches of the past decade.

The last epidemic in Egypt in 1883 has added to our store of knowledge in enabling Dr. Koch, delegated by the German Government, to study the disease thoroughly in the infected locality.

The discovery of the comma-bacillus in the progress of these studies is a grand achievement of scientific research, the bearings of which are of practical importance of inestimable value to all mankind.

While the opinions regarding the origin and spread of cholera have so far widely differed and were based on theoretical opinions only—now, we have a solid scientific basis for future sanitary measures and are no longer helpless and powerless in the face of a threatening epidemic of cholera.

It is not my intention to enter upon the minute details of the post-mortem results, the cultivations of the comma-bacillus and the experimental inoculations made therewith, which form the basis of Dr. Koch's discovery, and which have been presented in their minutiæ by the author in his report to the Conference for the Investigation of the Cholera question in the German Imperial Health Board at Berlin July, 1884. Nor will I enter upon a consideration of the disagreements and objections offered to Koch by von Pettenkofer and others in various publications.

The proofs adduced by Koch in support of his views and discovery are of so overwhelming a character that an unbiased reader can not doubt their exactness and truth. Koch has proven that Asiatic Cholera is due to a specific bacillus—the comma bacillus, and that this form of micro-organism is not found in cholera nostras, not even in its most malignant types. We can therefore positively assert the existence of Asiatic cholera by the demonstration of the comma-bacillus and possess in it a very valuable test for differential diagnosis. We are acquainted with the conditions favorable to the propagation of the bacillus—we know that warmth and moisture favor the proliferation and dry heat kills the bacillus, that cold is unfavorable to its multiplication but does not destroy it, and that its vitality is a tenacious one and propagation possible for a long period until favorable conditions stimulate to the marvellously rapid increase so characteristic of the microbe.

We are enabled to check and limit an epidemic by proper sanitary measures, that tend to modify the circumstances requisite to an active development and spread of the virulent agent, and circumscribe existing foci and guard avenues of dissemination therefrom. We can teach the public effective measures to prevent infection, and by success in this direction combat the fatal and paralyzing influence of panic.

This is progress. We no longer contend with an unknown and therefore more frightful enemy. We know the virulent agent and the means that effectively combat it. Thus it is made possible to stifle an outbreak in its origin, provided there is no lack of intelligent energy and bountiful means to carry out proper preventive sanitary measures.

Conceding the advance made in the direction of sanitary control, what can we report regarding progress in the treatment of the disease, when it is once upon us.

Has a better understanding of the causation of the disease, furnished us more positive indications and more efficient remedial agents for successful treatment? Has modern research devised measures that can be applied to the destruction of the specific bacillus when it has once invaded the human organism, or that will inhibit its multiplication in the infested intestine.

At the present day, unfortunately, the answer is in the negative. We can only hope that the therapeutic studies may soon catch up to and keep pace with the results of pathological investigation?

We already know a series of medicinal agents that inhibit the growth or destroy the individuality of the cholera bacillus. However, these remedies are of no practical therapeutical value, inasmuch as the concentrations necessary to a germicidal effect are likewise destructive to higher organic life. Allow me to enumerate some of the many remedies that have so far been applied in practice. It is impossible to enumerate in the space of a short essay the multifarious theories and methods of treatment so far suggested and practiced. It is my aim to invite a discussion regarding the several methods of treatment and their relative value.

In order to enable a proper appreciation of the proposed methods, I feel obliged to give a short resumé of the pathologico-anatomical conditions in cholera cadavers as found by Dr. Koch. Intestinal lesions, especially in the lower sections of the ileum, were generally present. A dark, brown discoloration, most intense next to and immediately above the ileo-cecal valve and less marked in the upper portions of the gut was a constant condition. The mucous membrane was dotted with superficial hemorrhagic effusions; oftentimes superficial necrosis with diphtheritic exudation had ensued. Corresponding to this condition the contents of the intestine were not clear, colorless, of "rice water" aspect, but of a sanious, sanguinolent, fetid character. Other cases exhibited changes less marked. The congestion and injection of the capillaries was less intense. In still other cases only the margins of the solitary follicles and Peyer's plaques showed injection.

Microscopic examination showed that in some of the cases, especially those in which the margins of the plaques were injected, corresponding to these zones of injection an invasion of bacilli into the tissue had taken place. These bacilli had either insinuated themselves into the crypts or were located under the epithelium, between it and the basal membrane, thereby separating and lifting off the epithelial lining. At other points a deeper penetration of the tissues had taken place. Again, in a number of cases these bacilli that were definitely characterized in size and form, so as to be easily recognized and distinguished from other bacteria and by these features attracted especial notice, were associated with bacteria of distinctive forms and sizes. These were either of larger, thicker dimensions or more gracile than the bacilli commonly found. Thus a striking resemblance is apparent to the diphtheritic necrotic sloughs or typhoid ulcerations of the intestinal mucosa; here also we find that in addition to the pathogenic destructive bacteria

an invasion of other indifferent bacteria takes place.

By analogy it therefore appeared that these first mentioned, deep seated bacteria were of no indifferent character respecting the choleraic process. All the other micro-organisms seemed of a secondary character, elements of subsequent invasion. The first mentioned bacilli always preceded the others, penetrated the tissue deeper and impressed one as if they had opened the way for the others. Koch recognized these first named bacilli as specific and pathogenic of cholera after long and prudent investigation. From their peculiar shape the name comma-bacilli was chosen by him.

Having found what he searched for in the ileum, Dr. Koch does not enter upon a special description of the other organs. A similar appearance of the small instestine has been previously described in pathological works, but no definite explanation or cause was offered. Niemeyer mentions the peculiar injection of the ileocecal region and the ileum, the ecchymoses and the extensive desquamation of the epithelium, and compares the cholera intestine to the external cutaneous surface that is denuded by vesicants or scalded by hot water.

He says that the peculiar changes consist at the height of the disease in the traces of an extensive catarrh, desquamative in character, attended by a copious transudation into the intestine and a considerable inspissation of the blood.

I will not offer anything respecting other pathological changes, nor the peculiarities, if death has occurred during the typhoid state; nor will I speak of symptoms and course of the disease from simple cholera-diarrhea to asphyctic cholera or the typhoid state following the acute attack. I pass on to a report of the treatment of cholera during the late epidemic at Toulon.

At Toulon the light forms of cholera were generally treated with opium; enemata of starch with opium were also employed. Internally the following formula was administered:

℞	Ether sulph.,	1.0
	Tinct. opii,	gtt. 15–20
	Ext. rhatanhæ,	1.0
	Syr. cort. aur.,	30.0
	Aq. melissæ,	120.0

For the vomiting Chartreuse and chipped ice was given. Bismuth was frequently combined with the opium. After the cessation of diarrhea and vomiting wine of Colombo was given to relieve the irritability of the stomach.

The cases of medium intensity were primarily treated similarly by enemata of warm spicy wines with tincture of opium. Vomiting was controlled by iced drinks, champagne. In a large number of cases water saturated with oxygen, as recommended by Dujardin-Beaumetz, was given, but with little success. The cramps were treated with dry frictions or by rubbing with spirits of camphor, opodeldoc, turpentine or chloroform.

Diaphragmatic spasm and precordial pain usually yielded to a hypodermic injection. The injection was made in the pit of the stomach. It was found advisable to combine atropine with the morphine.

If all of these remedies failed to relieve the muscular cramps, ether was injected. Cholera in its most severe types may be divided into the asphyctic or algid form and the non-asphyctic form. In the asphyctic form the patient is icy cold and has a livid cyanotic face. In these cases the chief object lies in the stimulation of the heart and restoration of animal heat. To this end ether was injected hypodermically (as much as a Pravaz's syringe full every hour.) Thereby life was often prolonged for a day.

Opium and morphine seemed to act unfavorably, but better success was observed from the hypodermic use of sulphate of atropine, which was given in doses from one-half to one milligram subcutaneously repeated four to five times in twenty-four hours. The heart beat became stronger, the radial pulse could be felt and the temperature rose. Together with the atropine, however, other stimulants, such as hot punch, Chartreuse, ether, liquor of the acetate of ammonia were given.

In a few instances faradization in the neighborhood of the subclavian region kept up for hours patients that were already in extremis. And in six cases that had already been given up, inhalation of oxygen repeated every hour for several minutes brought them through. Inhalation of oxygen promises to be of value in the therapeutics of cholera, but only in the asphyctic forms. No good results attended its use in the non-asphyctic forms. In the latter form the patient continues to have a certain warmth, the face is pale, the finger-nails blue, the pulse filiform, but to be felt to the close. These cases succumbed to the cholera-typhoid in many instances after the true choleraic attack has been conquered. In this typhoid condition sulphate of quinine and valerian, cold affusions and stimulation of the surface proved efficient.

Dr. Henry Lippert, of Nice, reports the following as his mode of treatment.

1. By means of a soft elastic tube which was introduced high up into the rectum one-fourth to one-half quart of luke warm water was injected several times a day. To this enema was added fifteen grains of quinine, ten to twenty drops of tincture of opium and five to ten drops of carbolic acid. Should the depressing influence of carbolic acid be feared, camphor or alum or boric acid, or nitrate of silver, or corrosive sublimate (not more than one-sixth of a grain) may be substituted.

2. Inasmuch as the stomach generally rejects everything, internal treatment was usually limited to giving chipped ice, iced brandy, and soda, champagne frappé, or strong black coffee. If the stomach was tolerant, ice water was given with a few drops of dilute nitro-muriatic acid with the object of exercising a preventive influence upon the interstitial nephritis that is of such grave significance in this disease. We know that Koch's bacillus thrives in alkaline media only; the administration of acids is indicated for this reason also.

3. Vomiting was controlled by frequent hypodermic injections of morphia in small doses. Owing to the reduced powers of absorption in the tissues, a new site for each injection was selected; violent cramps of the calves were treated by morphia injections locally together with massage with opodeldoc or sulphuric ether.

4. The patients were stripped, wrapped up in hot woolen blankets and were frequently rubbed down with hot flannels.

A sponge bath with equal parts of vinegar and alcohol, ninety-five per cent, was given every two hours. Aromatic vinegar was freely sprayed about the room, windows being left open. Thus the stomach, the skin and the lungs assimilate acid.

5. Anuria, owing to the reduced blood pressure, was treated with warm baths and cold affusions, cognac and champagne. Instead of diluted nitro-muriatic acid, acetate of potash and nitrous ether were also tried.

6. The inhalation of oxygen or of ozone and the hypodermic injection of ether did not seem to be attended with much success in the instances of a rapid sinking of vitality.

When the pulse disappears and the aortic murmur is lost in consequence of the circulatory interference, owing to the inspissation of the blood, then intravenous injections may prove beneficial. The following formula is the preferred one:

℞	Aquæ dest, - - - - - -	1000.0.
	Sod. chloridi, - - - - - -	6.0.
	Sod. carbon, - - - - - - -	1.0.

If the stomach will at all tolerate it, concentrated food is to be administered in the shape of frozen beef tea, extracts or essences of beef, yellow of egg, champagne, etc.

Relative to the treatment during the cholera epidemic in the Poor House in Strausberg in 1873, Dr. Guericke writes as follows: "I employ the hot water treatment. Every patient that was not yet asphyctic was wrapped in a sheet that had been wrung out of hot water and then enveloped in heavy woolen blankets. This procedure was repeated every two hours, and continued for twenty-four to thirty-six hours. The patients thereby perspired profusely. This loss was replaced by allowing them to drink freely of Selters water, hot coffee, gruel, etc. This hot water treatment proved very effective in the algid stage. Hot water baths of thirty-five degrees centigrade proved successful in some instances. This mode of treatment was recommended fifteen years ago by Lebert in Breslau. Internally opium was given in pill form with ext. lactuc. viros. and pulv. catechu. These pills were given almost exclusively in the cases of children. They are based on a formula given by Lebert. It was found preferable to administer to adults a single large dose of opium, say of about two grains, at the beginning of the treatment. If diarrhea subsequently again ensued, opium pills were again given. If the simple premonitory diarrhea developed into true cholera and the patients became cold and collapsed, then opium was discontinued, for it proved harmful. Then, according to Niemeyer, calomel was given. After the asphyctic condition was overcome, calomel combined with opium checked subsequent diarrhea. Nitrate of silver and tannin was given in obstinate diarrhea but with little success in threatening collapse. Brandy, etc. proved a good stimulant."

Tunisi, an Italian military surgeon, reports in one of the journals his experience during the epidemic of 1884. He recommends opium in large doses in order to check the premonitory diarrhea, and asserts that since the introduction of an immediate opium treatment no further deaths occurred among the troops he supervised; while on the other hand a great mortality prevailed among others not under his control.

He employed the tinctura opii crocata in half hourly doses of fifteen to twenty drops.

Niemeyer also recommends opium. He de-

clares that with cholera really established we are unable to meet either the indicatio causalis or the indicatio morbi; and that we are therefore obliged to limit ourselves to meet the demands of the indicatio symptomatica. This he believes to be done:

1. By efforts to check the profuse transudation of serum from the intestinal capillaries, as the source of all other symptoms and of absolute danger.

2. By efforts to replace the serous fluid lost by the blood.

3. By efforts to inhibit cardiac paralysis.

He recommends opium, as the ultimum refugium in all diarrheal disease, in doses of one-half to one grain, in the form of Dover's powder, or in the form of tincture in a mucilaginous menstruum. If after repeated doses the diarrhea mends, it is proper to continue smaller doses until normal alvine discharges give evidence that the serous transudation has been checked.

Should, however, diarrhea continue, or become worse, the patient collapse, the skin become cool and the dejections lose their color, then he considers opium contra-indicated and recommends that cold, oft repeated compresses be applied to the abdomen and calomel in grain doses repeated every hour. He has no faith in nitrate of silver.

The second demand, that of replacing the fluid lost by the blood, Niemeyer expects to fill by offering the patient ice and ice water.

Cardiac paralysis must be stayed by stimulants, alcoholic in first order, such as champagne, rum, arrac. The muscular spasm is relieved by energetic chafing with mustard-spirits, etc.

So much for Niemeyer, who, as he states, gives only symptomatic treatment, and confesses that he can suggest nothing to meet causal or specific indications.

As a remedy that may possibly answer and fulfill these two demands, the indicatio causalis and the indicatio morbi, I would suggest oil of turpentine; in conjunction with opium it may prove of great and specific efficacy. In the list of drugs employed by Dr. Koch to inhibit the growth of the comma-bacilli, I failed to find turpentine. This was the more a surprise to me, in that the germicidal virtues of turpentine are well understood. It would be worth while to study the action of the drug upon the bacillus. During our war, 1861–1865, when we had no carbolic acid and knew nothing of iodoform, turpentine and creasote were the only antiseptics available; and I can testify to the cleansing and stimulating influence of turpentine upon gangrenous wounds, indolent ulcers, etc. And of late the internal use of turpentine in croup and diphtheria has yielded most surprising, satisfactory results. From my experience I consider turpentine an excellent local and general antiseptic. At first I was timid in its internal use, and gave small doses in emulsion. But of late I do not hesitate to give dram doses pure. Diphtheritic ulcers, that yielded to no other medication, disappeared after six teaspoonfuls given during two days. No bad effects have been observed by me; no stranguria or renal irritation was set up; only a transient drastic action ensued.

This shows that oil of turpentine in large doses passes through the intestine and can act locally and directly in the small intestine upon the preferred sites of proliferation of Koch's bacillus.

The other well known pharmacological properties of turpentine make it very applicable in the treatment of cholera. The drug causes a sensation of warmth, accelerates the circulation and imparts a glow to the skin. At the same time the central nervous system is not affected. I therefore consider turpentine of great value in the first and second stages of the cholera. And in the typhoid stage small doses would also serve to moisten the dry tongue, relieve tympanitic distension, and cleanse intestinal ulcerations.

Finally I wish to mention a remedy that was employed in the United States during the epidemics of 1832 and 1849, namely, calomel in doses of a teaspoonful. Though this treatment appears absurd at first consideration, a plausible explanation is given when we consider the condition of the intestine in cholera. The first effect of such a large dose would be in first order a sedative action upon the mucosa of the stomach. Thus it may act as an antiemetic. A greater part of the calomel would pass the intestine unchanged and thus exert a local influence upon the bacillus-infested membranes. Calomel is known to be germicidal. I hold that this point should be more closely investigated. Possibly calomel, employed empirically heretofore, may be found to be a rational remedy, fully consistent with the indicatio morbi.

—We learn that the Mount Olivet Crematory at New York did not on trial accomplish complete and rapid inceneration of a body and the apparatus needs material changes before it can be used.

CLINICAL LECTURE.

Delivered at the New York Hospital

BY WM. H. DRAPER, M. D.,

Professor of Clinical Medicine in the College of Physicians and Surgeons, New York.

A Case of Pleurisy with Effusion.

History. Patient is a male, aet. 19. Native of Ireland occupation, laborer. Was admitted to the hospital yesterday. Gives no specific history. Never had rheumatism or ague; never was ill but once before. A fortnight ago while at work was overheated, and perspired freely. The day was cold, and patient thinks he took cold. Patient had a severe chill and afterwards became feverish, sweating at night. At the time patient had sharp cutting pain in left side of chest which was greatly aggravated by coughing and deep inspiration. No cardiac palpitation.

He felt some pain after this illness but kept at work till last Saturday when he was obliged to give up all work. On last Sunday he took an overdose of whiskey which nauseated and induced vomiting. Patient thinks he is losing flesh and strength; bowels regular, micturition normal, never had swollen feet; at times patient's left side was too sore to lie upon; recently blistered himself effectually with mustard. On admission pulse 77, respiration 24, temperature 100.4°.

Gentlemen, you hear the history of this case. The history is a typical one of an acute disease in a healthy adolescent.

There is a distinct history of an exposure. He became very much heated while at work and was exposed to a draught afterwards. He had a chilliness with fever and pain on the left side aggravated by cough and forcible inspiration. After an illness of two days he went to work again until five days ago, when he was obliged to give up because he was very weak, without appetite and with very short breath.

Yesterday he came in here. Now from this subjective history, I have no doubt that some of you will be able to suspect the nature of his disease. Before entering upon a physical examination of this man, let me say to you that this is a typical history of many cases of pleurisy which come into this hospital. There is exposure; there is chill, fever and pain which embarrass the patient for a day or two; then they get used to it. They try to go to work, and at the end of a week or ten days they find themselves so much embarrassed in breathing, so weak, so unable to work, that they give up and come under the observation of the doctor. This, I say, is a typical history of cases of this kind which we see here in this hospital, but does not often happen in private practice. The attack is borne patiently for a couple of days, and the patient presumes he is well, and is finally obliged to give up in consequence of the dyspnea and the fever which render him so weak that he cannot go out. And then it is found on objective examination that the patient has a chest filled with more or less fluid.

Physical Examination.—Inspection shows here in the first place a rapid movement of the chest. Second, unsymmetrical movement of the chest and bulging of the intercostal spaces on the affected side. The position of the heart beat should be determined in inspecting the chest. It is well to put your hand as firmly and evenly as possible upon the walls of the chest over the heart; and sometimes we can detect the apex beat in this way. It is felt in the epigastrium. Now we have accomplished all we can by palpation and inspection.

Percussion.—By percussing the clavicle directly we appreciate the difference; the right side of the chest is more resonant than the left. The liver is depressed, the lower margin being at the seventh rib. There is no change in the size of the liver. On percussing the back, the resonance is louder on the left side. No resonance on the right side, but a sense of resistance.

Auscultation.—On the left side there is a tubular breathing; there is a natural voice on the right. This bronchophony is not a universal sign in pleurisy with effusion. It is almost invariable in children, but as a rule in adults you get the absence of vocal resonance and an absence of breath sounds. Here you get breath sounds and voice sounds, which you would get in pneumonia or from any other cause which solidified the lungs. Occasionally, however, in a considerable proportion of cases you detect a bronchial respiration and a bronchophony, especially near the root of the lung in pleuritic effusion, particularly in children under ten or twelve years of age. It is the rule to get a bronchial respiration and a broncophony in fluid effusions, as you can readily understand. The presence of these signs makes the diagnosis of pleuritic effusion from condensation of the lung from any cause whatsoever, sometimes difficult, especially in those cases where pleuritic effusion fills or nearly fills, as here, the chest.

Now there are certain points always to be borne in mind in order to diagnosticate pleu-

ritic effusion from condensation of the lungs. The diagnosis of pleuritic effusion from pneumonia is generally pretty easily made, because along with bronchial respiration and bronchophony, which you get in the consolidation from inflammation, you are apt to get moisture sounds that are produced within the lung, or what appear to be moisture sounds, which are really friction sounds produced by the friction of the free surfaces of the pleura.

Then again, where as in the majority of cases the amount of fluid is such as to partially fill the chest cavity, you know by changing the position of the patient, where the level of the fluid is; and so diagnosticate a pleuritic effusion from a consolidation of the lungs by the fact that the pleuritic effusion displaces the heart, while the inflammatory processes that occur in the lung and other affections of the lung which contain this tissue do not change the position of the heart. When the fluid effusion is on the right side of the chest the displacement of the liver may be so considerable as to aid you in the diagnosis of pleuritic effusion from an affection of the lung itself.

But then, of late years we have a means of testing the diagnosis of pleuritic effusion from other conditions, which is a crucial test, and which enables you to lay aside all other tests. I allude to the puncturing of the chest with a needle. This is a perfectly safe procedure, provided you puncture in the right place. The places that are selected for puncturing are usually the axillary line and the line that is let fall through the inferior angle of the scapula. Where you puncture in the back you may puncture as low down as the eighth intercostal space. Where you puncture at the axillary line you want to puncture below the seventh intercostal space. The house physician has punctured in this case and has found fluid, and he will puncture the patient for you now again. [The doctor punctured him in the eighth space in the line of the inferior angle of the scapula.] Here you have a perfectly clear fluid of which the chest is full. It is not possible that the lung was punctured, for there is no blood in the fluid that can be perceived, and you see that the needle is a very short one.

Now the diagnosis of the case is complete. The diagnosis might be made easily from the subjective signs; it is confirmed by the physical signs and most strongly by the demonstration.

This is a typical case of pleurisy with effusion, by no means an uncommon disease. It is not necessary for me to dwell any farther upon the diagnosis of these from other affections, because, as I have stated, of the crucial test that it is possible to make in this disease; and we are no longer at sea, as we might be with the other physical signs in any case.

Now what shall we say about the treatment? I will not dwell upon the prognosis, for the prognosis in the majority of cases is good.

Treatment.—The treatment of these cases in the olden time consisted in the application of blisters and the administration of a diuretic. This was the classical treatment when I was a student of medicine, and many years after I became a practitioner. It is only within twenty years that aspiration of the chest has been very generally resorted to, and even now, I think that in cases of simple pleurisy with serous effusion, it is not resorted to as much as it was ten years ago. In cases of purulent effusion it is daily becoming more and more common; but the fact in regard to these cases of pleurisy with serous effusion is that the fluid is often very rapidly absorbed under the influence of diuretics and counter irritation, and the aspiration of the fluid must in these cases of serous effusion ofttimes be repeated, from the reaccumulation which results. This patient will be put upon a diuretic, and counter irritation will be applied in the shape of blisters or iodine. But neither of them is practicable just at the present because the patient has blistered himself, and we shall see at the end of a week what changes occur. He has been in the house now since yesterday evening. Temperature last evening 102.4°, temperature this morning, 102.3°. Probably he will have a temperature this evening of 102°, and this may go on for some days, and then he may pass into an apyretic state. You see he has very little discomfort, and the fluid will disappear under this diuretic medication. This is the rule. Sometimes, however, these patients do not get any better under the use of diuretic medication. You cannot stir the level of the fluid. You cannot, even by increasing the amount of water apparently, diminish the amount of fluid in the chest, and, under such circumstances, it becomes necessary to relieve the patient by aspiration. This is a perfectly simple and safe operation as performed nowadays, and one that should be performed where you will fail in two or three weeks in making any impression upon the fluid by your diuretic medication.

—Buffalo has a fine crematory. The St. Louis society is calling in 50 per cent of the stock subscribed in order to begin work.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, December 12th, 1885, the President, Dr. Atwood in the chair.

Tartar Emetic in Pneumonia.

Dr. Hill called attention to the fact that some years ago Dr. Montgomery read a paper on the use of tartar emetic in pneumonia. Dr. Montgomery was surprised that physicians neglected its use so much in the formative stage of the disease, as he regarded it the remedy par excellence. The speaker had given it some attention and he had again resorted to it with good results. He regarded it as a sheet-anchor when given in nauseating doses. Of course, he also used other remedies. He found pneumonia very prevalent now.

Dr. Hill regarded as the formative stage the condition in which the doctor found his patient when called.

Dr. Hurt thought that the difficulty attending its use was that a very small number of the cases seen by the physician were in the formative stage. He had only seen about five per cent of cases in this stage.

Dr. Porter had seen a number of cases of pneumonia, but chiefly in consultation. He did not use tartar emetic except in certain cases. Pneumonia is a disease requiring supporting treatment when the doctor sees it. If the heart's action can be kept up, the patient will get well of the immediate effects. If the disease is seen in its very early stage and there is a high pulse and fever not too high, and depressants can be safely used, tartar emetic will do good. But it would not do to use it in an old patient. We must discriminate, rely on stimulants and whatever else the indications suggest. It is wonderful what direct stimulants will do. The greater the amount of lung involved, the more should depressants be avoided. The speaker said he was very careful in the use of depressants in all diseases of the respiratory organs. He believed warm outward applications to be excellent. Very few physicians know how to apply a poultice to the chest. He used a hot poultice of linseed meal, and if the skin was cold or obstruction existed he added mustard. He used a large one and placed oiled silk over it. These act as stimulants and not as counterirritants. He thought that pneumonia was not as fatal as it used to be.

Dr. Blount never gave tartar emetic in pneumonia. His method of making applications to the chest consisted in taking a flannel cloth wringing it out of hot water as dry as possible and applying it. It could be put on without trouble, was cleaner and retained its heat for a long time.

Dr. Rowland was in favor of local applications. He had abandoned poultices long ago but used a method which he considered superior. He employed old linen wrung out of hot water and preferred it because it sticks closer to the skin. He covered it with oiled silk extending above and below the compress. This retains its heat and moisture for a long time, it being only necessary to change it twice in twenty-four hours. So far as treatment otherwise is concerned, he is led by the indications present. He had used tartar emetic in a few cases and it acted admirably. He also believed in stimulants in their proper place.

Dr. Atwood thought spongiopiline the best vehicle for making hot applications to the chest, as it is cleanly, retains heat and moisture a long time, and is coated with an impermeable covering. It is especially useful in treating patients in hotels and young men in their rooms. The only drawback is its high price.

Dr. Hill thought that there is but little difference in our treatment of pneumonia. He was surprised that the tartar emetic treatment was not criticized more. Of course, the cases in which it is used must be selected. He used local applications, stimulants, etc.

Sarcoma of Neck.—Sarcoma of Antrum Highmori.—Presentation of Patients.

Dr. Prewitt said that he had two interesting cases of tumor to present.

Case I is a young man of 19 who states that two or three years ago he had mumps on the left side. Since then the swelling came on that side. The tumor, however, is not due to the mumps. It is on the same side, but does not extend as high as the parotid gland by an inch and a half. He swallows with difficulty, and on deglutition the swelling bulges out, pushed by the bolus of food, indicating a freedom from adhesions. The common carotid lies in front of it; on the inside it projects into the throat. It is movable and has developed between the blood vessels and the cervical vertebræ. The probabilities are that the pneumogastric nerve is pushed out. He does not sweat to the same extent on the left side. Taking everything into consideration, it is probably a sarcoma. The pomum Adami is pushed one and one-half inches to the right;

the voice is somewhat changed, and he is deaf in the right ear.

Case II. is a young man of 17. He first noticed an enlargement of the left cheek some eighteen months ago, the nostril being also choked up. The growth is also situated posterior to the soft palate. By passing the finger under the lip it is seen that a part of the bony wall of the antrum has disappeared and there is a soft feel there. The nostril and posterior nares are seemingly filled by the growth. The eye is lifted up and pushed forward, the floor of the orbit being almost level with its margin or even higher. It is interesting because it was at first supposed to be catarrh, then polypus. The growth is evidently within the antrum, and is probably sarcoma. It is certainly not cancerous. The patient cannot breathe through either nostril.

Dr. Dickinson saw a case similar to Case I. in Langenbeck's clinic in Berlin. An operation was performed, but before it was concluded the external carotid and jugular vein had to be taken up. The man died in eight days and, upon post-mortem, it was found that the growth had involved the esophagus. Inspiration was stridulous during life, caused by the fact that three tumors existed in the trachea, so disposed around its circumference that one fell upon the two others so as to occlude the opening.

Dr. Blount saw a case similar to Case II. in a negro. The protrusion of the cheek was as large as the first, the nostril being occluded. The hard palate, on that side, was pressed down until it was on a level with the crown of the teeth. The pharynx was so filled up that he swallowed solids with difficulty. The eye protruded as much as in the exophthalmic goitre. It was probable a sarcoma, but the patient would not consent to an operation.

Dr. Mudd regarded the cases presented very interesting. He presumed both were sarcomatous. Case I. was important on account of the parts involved. If well encapsulated it would be proper to remove the tumor. The most serious part was the involvement of the esophagus. In regard to Case II., operations were in the main good. Removal of the upper jaw can be done quickly and thoroughly. The operation was formidable on account of rapid and extensive hemorrhage, For many years he had operated without any external incision except from the mouth to the ala nasi. The opening gives ample room. It is a mistake to make the incision longer unless it is carried well out on the malar bone. He had devised an operation which he thought was better than the ordinary one. It is for the purpose of liberating the superior maxilla from the malar and frontal bones, by an incision an inch long made along the lower border of the zygoma well forward. Through this the bone nippers will reach the parts. If the malar bone is to be left, make the incision more forward, not longer. This can be done while the patient is still under the anesthetic, and is the most tedious part. The rest can be done before the patient recovers from under the influence. One important point in operations on the upper jaw is the possibility of leaving a portion of the bone. The orbital plate, alveolar process and nasal process are the most important except the malar bone, as the deformity is great when the last is removed. It is important to leave the palate process of the superior maxillary next to the median line, as a very small opening will result between the mouth and nose, and only a small obturator be necessary.

Local Use of Cocaine.

Dr. Atwood had used cocaine in the removal of a lipoma from the forehead, injecting ten to fifteen drops hypodermically. There was no pain attending the operation.

Dr. Mudd had removed a small tumor in the same way a week back and it suppurated. He did not know that the cocaine caused this, but he expected it to heal by first intention.

Dr. Wolfner had lately employed cocaine before cauterizing a fissure in ano and there was no pain.

Dr. Hill had lately employed cocaine before cauterizing a fissure in ano and there was no pain.

Dr. Scott had employed it in gynecology a good deal. He thought it especially valuable in examining young girls with a speculum, as there was no pain and it did away with the necessity of using an anesthetic.

Dr. Atwood reported that the case of morphine habit he had mentioned at a previous meeting, had been six months without taking morphine and did not desire it. The man is not using cocaine either, now.

AMERICAN PUBLIC HEALTH ASSOCIATION.

The 13th annual meeting of this body convened at Willard's Hall, Washington, D. C., on Tuesday, December 8, 1885, with the President, Dr. James E. Reeves, of Wheeling, W. Va., in the chair.

After the usual preliminaries, Dr. E. M. Hunt, Secretary State Board of Health of New Jersey, read a paper on "Sanitary and Statistical Nomenclature." Dr. John S. Bill-

ings, U. S. A., followed on "Forms of Tables for Vital Statistics." The following is an abstract:

After discussing different forms now in use, he proceeded to explain what ought to be included in or rejected from such tables. Vital statistics are furnished to the public through the press, and he urged that it was the wisest course for the health officers to furnish full and accurate reports of prevailing sickness and deaths every week, so far as he has the data to do so and thus avoid the possibility of concealment. Dr. Billings said there were several sources of information with regard to the amount and character of disease prevailing in a city of which the health officer can, with a little tact and management, avail himself, and which are too much neglected. There are the public dispensaries and other institutions for the treatment of the sick, including the city physicians to the poor, the prisons, reformatories and asylums, and the public schools. From all of them which are supported from the public funds he should be able to obtain reports showing the amount and character of the diseases coming under their notice. In conclusion, attention was called to the importance of using graphic representations of the results of studies of vital statistics, to be given in the form of diagrams and shaded maps, which, although rather expensive, would be much more satisfactory and cheaper in the end.

Dr. Henry B. Baker, Secretary State Board of Health of Michigan, read a paper on the "Relations of Rainfall and Water Supply to Cholera." The paper was illustrated by diagrams, etc., and gave conclusive evidence that a good water supply and an abundant rainfall limit the spread and reduce mortality from this cause.

"The Virus of Hog Cholera" was the subject of a paper read by Dr. D. E. Salmon, D. V. S. He said that during the present year the ravages of hog cholera have been unusually widespread and severe, costing the country nearly $30,000,000. The disposition of the millions of carcasses of hogs that have died from the disease is a matter which affects the health of our people. Sometimes the carcass is left to putrefy in the open air, to be preyed upon by carnivorous animals and birds; sometimes they are thrown into the ponds and streams which furnish drinking water to our cities; sometimes the lard is rendered from them, and what finally becomes of this product is an interesting subject for speculation. Only exceptionally are the carcasses buried or burned. The study of virus is of peculiar interest to us at this time because of its bearing upon the general subject of contagion. The science which treats of this important class of phenomena is still in its infancy, but experiments are in progress which will undoubtedly result in decreasing the disease.

At the conclusion of Dr. Salmon's paper, Hon. Erastus Brooks, of New York, said this was a commercial as well as a sanitary question. He referred to the action of the French and German authorities in prohibiting the importation of American pork. He heartily agreed that the subject should be further discussed. Dr. T. S. Verdi, of Washington, said the assumption that our animals arrived in Europe in a diseased condition was only an excuse to keep out the American cattle.

Mr. Brooks said that while this was probably true, it was not the whole truth. The alleged improper packing of pork, rendering it unfit for use when it arrived in France, was the avowed cause of the prohibition in France. He referred to the tariff duties imposed here as tending naturally to retaliatory measures. He thought it was our duty to see that food sent abroad was properly packed. Dr. Reed, of New York, offered a resolution recommending legislation—national, state and municipal—to provide protection for the people against the sale of diseased meat. The resolution was referred.

Dr. J. Berrien Lindsley, the treasurer, reported that the receipts for the year amounted to $3,338.13 and the disbursements, $2,-233.10, leaving a cash balance on hand of $1,105.03.

The committee which was appointed at the last meeting of the association to examine the subject of disinfectants, antiseptics and germicides in their relation to preventive medicine and sanitation, made a printed report through its secretary, Dr. George Rohé, of Baltimore, which was referred to the executive committee. The Committee on Necrology reported that the following members had died since the last meeting in 1884 at St. Louis: Dr. J. E. Thomas, Savannah, Ga.; Dr. F. W. Hatch, Sacramento, Cal., and Dr. P. V. Schenck, St. Louis, Mo. Dr. Charles Smart, United States Army, of this city, read the report of the Committee on Incorporation, and the constitution, which is incorporated under the laws of the District of Columbia, was amended so that the Incorporation Committee was made a standing committee.

THE NIGHT SESSION.

Dr. Toner, of Washington, D. C., delivered an address of welcome, introducing it by the

reading of a letter from President Grover Cleveland who regretted that affairs of state prevented his attendance. The president wrote:

Surely the advancement of sanitary science and its practical application to the public health are of immense importance to the people of our land. Of course the value of efforts in the direction of a better understanding of the causes of disease, and protection against the same, is too palpable for suggestion or argument. But I do not think the advantages of an improvement in the condition and sanitary surroundings of the homes of our workingmen and of the poor among us is sufficiently appreciated. Healthful aud comfortable habitations indicate the best features of a country's prosperity and advancement, and men with good health and wholesome surroundings are apt to be contented and useful citizens.

The difference in the death-rate of cities and localities unexplained by natural and inherent causes is of itself enough to give great prominence to the work of the Association, and if this beneficent organization shall succeed, as it ought, in impressing upon municipalities the duty of sensible and thorough sewerage, a plentiful and pure supply of water and general cleanliness, together with a proper construction of school-buildings for the children of their citizens, it may well point with pride to its achievements.

With the hope that the Association may be the means of constantly increasing benefit to the country, and with expressions of heartiest sympathy with its work, I am yours sincerely.

At the conclusion of the reading, President Cleveland was immediately elected an honorary member of the association by acclamation, he being the first gentleman to whom this honor has been given.

The President, Dr. James E. Reeves, then delivered his annual address. He invited the attention of his audience to subjects which have encouraged the most industrious energies of his life—namely—the public health. After paying a high compliment to the local committee of reception for the excellent programme which had been arranged, he said that every assembly such as he addressed, moves forward another day's journey the ark of the sanitary covenant, and humanity is bettered and made happier thereby. In these days of political struggle and divers interests we hear much of the various means for the advancement and protection of the agricultural, manufacturing, mercantile and many others of less extended importance. What question of mere business interest can compare either in importance or extent with the general and individual interest which every man has in the preservation of health and life. The National Legislature is liberal in many matters and ought to be equally liberal in providing for the public health. On this point he said:

We are to-day at the very threshold of great possibilities in preventive medicine, and the central Government should foster every effort for the success of the work in which sanitarians are so heartily engaged. To aid them in the study of contagious or infectious diseases, both among human beings and animals, and the blights upon the crops, a National Biological Laboratory should be provided; and no other place would be so well suited for the location of such a school of science as the new building now in progress of erection for the Army Medical Museum and Library. With a thoroughly equipped national school of biology our scientists would not then have to visit laboratories abroad—to Pasteur, in Paris, Klein, in London, and Koch, in Berlin; neither should we then see our distinguished Sternberg quartered at the Johns Hopkins University, in Baltimore, for favorable facilities for the study of micro-organisms in relation to diseases.

Dr. Reeves expressed the hope that the present Congress would be influenced to establish a health bureau, which would prove a blessing to the whole country.

INTERNATIONAL CONGRESS.

Special Announcement.

The Executive Committee of the Ninth International Medical Congress, to be held in the City of Washington, D. C., commencing on the first Monday in September, 1887, having accepted, under Rule 10 of the Committee on Preliminary Organization, the charge of the business of the Congress, hereby give notice to the members of the medical profession that they have been actively engaged upon, and have now nearly completed the arrangements for this meeting; and they anticipate the hearty cooperation of the profession everywhere in developing this great scientific and humanitarian assembly.

By order of the Executive Committee.

Henry H. Smith, M. D., Philadelphia,
Chairman of Executive Committee.

Nathan S. Davis, M. D., LL.D.,
Secretary-General of Ninth Int. Med. Congress.

Chicago, Nov. 24, 1885.

CORRESPONDENCE.

NOVEMBER, 19, '85.

Editor Review: The chief event of this week is, or perhaps I ought to say, should be, the meeting of the General Medical Council for a short extra session. That it should be an event of some importance to the medical world is, I think, obvious: that it is not so, is at least, equally obvious, for I have not seen any member of the profession there except those connected with the press, and not many of them. There have been some rather curious and difficult questions raised indirectly during the present session, which I think should be publicly ventilated, though whether they will be so in our own journals or not, of course I am quite unable to say. I refer to the removal of a man's name from the Register—that is, the deprivation of his legal right to follow his calling. Of course I am well aware that in the majority of instances where a man is struck off for unprofessional conduct he continues his practice just as before, the only difference being that he cannot sign death certificates, or recover fees in a law court, but he can and does easily arrange to meet these two difficulties. The usual practice in such cases is that the licensing body, which gave the man his diploma, after investigating his case and being satisfied that he is a sufficiently disreputable person, revokes his diploma or license, and then informs the General Medical Council of the fact, and asks that the qualification shall be erased from the Register, and if it happens that the man holds no other qualification, it has hitherto followed, as a matter of course, that the name has been also removed.

It has been almost always the custom for the Council to be informed of the ground on which the offender has been struck off the roll of the licensing body in question, but Dr. Quain and several other members of the Council hold that it is sufficient that he has been so struck off, and that the Council have no right to inquire into the motives of the Corporations, as that would be practically sitting in judgment upon them; but on receipt of information, say, that a man has been struck off the roll of the College of Surgeons, they must forthwith erase the M. R. C. S. against the man's name, as to allow it any longer to appear is to state that which is untrue, and the Register must not be allowed to announce an untruth. Now this is a very specious argument, but I do not believe it will hold good. The subject cropped up on the proposal of Dr. Aquilla Smith to remove certain qualifications against a man's name which had been granted by the College of Physicians in Ireland, that body having thought fit to withdraw these qualifications, and he expressly declined to give the reasons why they had so acted. Now, the Medical Act gives authority to the Council to remove names or qualifications from the Register if they see fit, and, as several speakers pointed out, how was it possible that they could see fit when they did not know what the nature of his offence had been; ultimately the Council decided by a majority to leave the matter open until they had some evidence before them as to the nature of the offence. The subject cropped up again, curiously enough, two days later, and in a form illustrating most clearly the necessity for caution in the matter.

The General Medical Council has the superintendence of all matters, dental as well as medical, and a notice was brought forward that the name of a certain dentist holding a diploma from the College of Surgeons in Ireland, had been removed from the roll of that body, and a request was accordingly made that that qualification be erased from the Register. On investigation it appeared that the man had no other qualification and therefore, that his name must follow suit if the qualification were removed. Now the offence with which this man had been charged was that of advertising which was in direct contravention of the terms under which he held his diploma from the College of Surgeons; they were, therefore, perfectly right and justified in removing his name from their list, but the question naturally arose whether advertising was so dire an offence on the part of a dentist that he ought to be deprived of the right to practise dentistry on account of it. Even those who were most strongly in favor of the so-called accuracy of the Register were constrained to allow that such an erasure would be most unjust, and one of the speakers reminded the Council that under the Dental Act there was an appeal from the decisions of the Council, though under the Medical Act there is none. Ultimately, the wise course of referring the matter to a committee was adopted.

Last week the Bowman lecture was delivered before the Ophthalmological Society by Dr. Hughlings Jackson, F. R. S., who is, I may say without fear of contradiction, the most distinguished neurologist of the day in this country. He chose for his subject the relation of ophthalmology to diseases of the nervous system, but as the subject is a very complicated one, and as I have not since had an opportunity of reading the paper, your readers must pardon me if I decline to say more about it than that it was an admirable address, Dr. Jackson following, as usual, closely the lines which Herbert Spencer has laid down, and that it will be published in full in the three medical journals this week. The audience was a very distinguished one, including such well-known men as Sir William Gull, who proposed a vote of thanks to the lecturer at the close of the evening, Dr. Wilks, Dr. Bristowe and Dr. Broadbent. After the lecture, the President held a reception at his own house which was attended by nearly all those who had been to the lecture.

At the ordinary meeting of the Society which was held the day before the lecture, Mr. Nettleship raised a question of very great importance when he asked whether any of the members had had any reason to attribute bad results to the use of cocaine in ophthalmic surgery, mentioning that he had had a run of panophthalmitis, for which he could find no other likely cause. Other speakers had not always been satisfied with it, but some had traced their failures to the use of solutions that were not fresh. The matter is one to be borne in mind.

Yours,

R. M.

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BACTERIOTHERAPY.

The readers of the "REVIEW" remember that in our issue of August 29, we wrote on the experiments of Cantani on the influence of bacteria of one kind on the growth and development of other pathogenic micro-organisms. The British Medical Journal contained the account of the practical application of this mode of therapeutics upon a phthisical subject on the same date, August 29. It will be remembered that Cantani employed spray-inhalations of cultivations of bacterium termo and saw the specific bacillus of tuberculosis disappear from the sputa. A corresponding general improvement ensued.

We now learn from the British Medical Journal that Dr. Salama, of Pisa, reports another case of the same kind.

The details are that in a case of phthisis, with a cavity in the apex of the left lung and various patches of consolidation, Koch's bacillus disappeared within about a fortnight after the inhalations of the bacterium termo were commenced, all the other symptoms improving at the same time. Dr. Maffucci, Professor of Pathological Anatomy at Pisa, who verified the diagnosis, prepared the bacterium-culture. A few drops of spring water were added to a sterilized solution of gelatine in meat-broth with peptone. After a day or two, colonies of various micro-organisms made their appearance, and amongst them was the bacterium termo. Under the microscope, a sterilized platinum needle was dipped into this, and then introduced into another portion of the gelatine-preparation. After two days, this was found to be a pure culture of the bacterium termo. The contents of one test-tube prepared in this way served for one day's inhalations, being mixed with a meat-broth made from 150 grams of beef to 200 grams of water, and left for eight or ten hours, according to temperature. If left too long, the putrefaction became insupportable to the patient. Broth so prepared was given by Siegel's spray-producer every day in divided doses. Sufficient time has not yet elapsed to show whether the improvement was permanent.

We find the following comment added:

"It is not quite certain that the bacterium was the sole agent of amelioration here. It is possible that the meat-broth may not have been without its effect; and it is just within the range of supposition that the bacterium has a psychical iufluence on physician as well as on patient, not less important than its alleged bacillicide properties."

We fail to see the significance of this. It appears to be a well established fact that the bacterium termo is deadly to the bacillus tuberculosis. Cantani in a long line of experiment showed this conclusively. He claims only that the masses of bacilli in cavities and in the bronchi make room for the inimical microbe, which is harmless to the organism. Cantani expressly states that he does not believe that the pathogenic bacillus that is situated in the tissues proper can be reached by the bacterium termo. In other words, he did not express himself to the effect that tuberculosis of the lungs may be cured by his bacterio-therapeutic measure, but simply asserts that a marked improvement follows the destruction of the myriads that swarm in the accessible portions of the lung and there make havoc.

TREATMENT OF SEROUS PLEURITIS.

In the Zeitschrift fuer Klinische Medicine, Bd. IX, Professor Julius Glax expresses the

opinion that the amount of the exudation in a case of serous pleurisy is not to be regarded as an indicatio vitalis, and that, unless real and serious respiratory embarrasment exists no operative procedure should be employed; he thinks that three weeks may be allowed to elapse before puncturing the thorax. If this hold good for large transudations the expectative methods are still more in order in case of smaller accummulations. Small amounts are resorbed in short time if proper dietary regimen be observed; and certainly puncture and aspiration are not absolutely free from dangers. One accident that may and does occur, is the development of a purulent out of the simple serous pleuritis after puncture. Although not so frequent an occurrence since the adoption of methods of cleanliness and antisepsis, still the possibility of one single such unfortunate occurrence ought to urge us to be expectative, if circumstances permit. On these grounds Ewald bases his objections to operative interference with small quantities of pleuritic exudation and Hofmokl reports cases of purulent inflammation having been so excited. Ewald for these reasons even objects to indiscriminate trial-puncture.

Glax does not set himself up as an unqualified opponent of thoracentesis, but desires to insist upon the advantages of waiting, and calls attention to the fine results in cases of sero-fibrinous exudations that follow the practice adopted at Koerner's clinic in Graz. He recommends this method in all cases that do not demand operative measures for the immediate relief of dyspnea.

The method is based in part upon restriction and prohibition of fluid ingesta. Koerner lays great stress in all respiratory and circulatory diseases upon the relation of urine-excretion to drink. He makes note in each case of the measures of urine excreted and fluid partaken of during each twenty-four hours. If he finds that a quantitative disproportion between excretion and ingestion exists, then fluids are cut down to a point at which the diurnal amount of urine is equal to at least one-half, or better still, to two-thirds of the fluid taken. This is the proportion that obtains approximately in healthy individuals.

Now then, inasmuch as diuresis is scanty in pleurisy, we have an indication to cut off fluid ingesta in such cases. This is done at Koerner's clinic. Only enough liquid is allowed to quench thirst, warm drink is entirely prohibited and small draughts of cold water given. This direction can be carried out easily. The patients do not oppose it.

In addition to this regulation of drink, the patients get saline drugs that are rapidly absorbed. The theory is that of rapid absorption into the blood, subsequent diffusion into the exudative accumulation, with corresponding absorption of fluid, which is then excreted by the kidneys. Ordinary table-salt fills this requisite especially well. It is a clinical fact that in pleuritis and pneumonia the urine is very poor in chlorides; this is believed to be due to a passage of such salts into the exudation.

Koerner has practiced this method in all cases of sero-fibrinous pleurisy that he has treated since 1863.

Glax reports his cases that he had charge of in three and a half years. Twenty-five cases of serous pleuritis occurred in this period; in thirteen cases the fluid accumulation did not reach higher than the apex angle of the scapula; in twelve cases nearly the whole of one of the pleural cavities was filled. The former class of cases did remarkably well without exception. The salt was given in wafers to avoid sensation of thirst in the pharynx, that would otherwise become manifest.

The twelve grave cases, in which large exudations existed, also fully recovered; the mean duration of the affection was thirty days. One case was complicated with malaria and thrombosis of one saphenous vein. If we exclude this case, the mean period of illness was but twenty-two days. Of course this time is very much reduced if we compute the average duration of the whole number (twenty-five) of cases.

It appears, then, that the "regulation of the

hydrostatic balance" and administration of salts is attended by successes as good and duration of illness as brief as are claimed for the method of absolute prohibition of drinks, which is very annoying to the patients, and methods of thoracentesis, which are not free from positive dangers. Pimser, who has published figures on the "total abstinence" method averages a duration of twenty-eight days. The method of puncture and aspiration, if all complicated cases are thrown out, and even such cases that were discharged "not well" are counted, gives an average duration of 47.7 days.

The above shows the advisability of trial of the Koerner-Glax method.

Our Index.

With this number is given out a complete and exhaustive index of the contents of this journal in the half-year, closing with the current number.

We again call upon our friends to make an effort to swell our list of contributions by reporting, if only in brief, the interesting cases or valuable observations each and every one of us meets in his daily walks. It is thus that a more intimate professional relationship is fostered, discussion is invited, and benefit accrues to all.

We are ever ready to lend our pages to notes from practice, to reports of proceedings of local societies, and willingly allow a reasonable number of extra copies of such publications.

We hope our patrons will have professionally an active and successful New Year!

Diphtheria Cured by Tolu Varnish.—A correspondent of the British Medical Journal writes: M. O. L., aged 13, complained at 2 o'clock on November 10th of malaise. She was in bad spirits, owing to the death of one of her schoolfellows from diphtheria. A saline aperient was ordered, and taken in the evening. Next morning, at 7 o'clock, she said she felt "all right," but complained of sore-throat.

On examination, a thick, well formed, greyish looking patch, rather smaller than a florin, but of oval shape, with gangrenous edges, was seen over the right tonsil, and on the right posterior pillar of the fauces. At 5 o'clock in the afternoon the patch had somewhat increased, and two small patches were seen on the other side. The diphtheritic spots were covered with tolu varnish, as recommended in Dr. Morell Mackenzie's work. Tincture of perchloride of iron, with glycerine and chlorate of potash was prescribed as a constitutional remedy. The patient expressed herself greatly relieved by the varnish, and I applied it twice a day, instead of once, as advised by Dr. Mackenzie. In about forty-eight hours from the time when it was first seen, the membrane began to disappear, and, on the evening of the fourth day, not a trace of it remained.

I may add that it is important that the fauces and tonsils should be first well dried with blotting-paper. The solution can be most conveniently applied with a camel's hair-pencil fixed into a long wooden penholder, as supplied by Messrs. Maw. The method of treatment which I have found so successful in this case being, I believe, little known, I think I shall be doing a service to my brother practitioners in placing it on record.

Congenital Absence of a Lung.—Dr. Wenzel Gruber has recently published, in Virchow's Archiv (British Medical Journal), notes of two cases of congenital absence of a lung. The first was described by him in the Oesterr. Zeitschrift für praktische Heilkunde in 1870. The right lung was absent in a female still-born child. On December 10th, 1884, he found the left lung absent in a female child born prematurely. The child had also an accessory liver and three accessory spleens. The left thoracic cavity was occupied above by the left lobe of a very large three-lobed thymus, enveloped in a distinct fold of the pleura given off from that membrane as it passed over the left mediastinum. Inferiorly, the heart and mediastinum filled the left side of the thorax. The right lung

was large, and not divided into lobes. An accessory liver lay in the ligamentum triangulare sinistrum, six millimetres apart from the main part of the liver. It was oval and flattened, and a centimetre and a half in its longest diameter. The three accessory spleens were, as usual, in the gastro-splenic omentum.

Cutaneous Affections in Gonorrhea.—The London Practitioner says that M. Gilbert Mallet invites in the Revue de Médicine renewed attention to the eruptions met with in the course of gonorrhea. Carefully excluding all cutaneous eruptions that may be due to errors in diet or the administration of cubebs of copaiba, he classifies the remainder in three divisions. (1) Eruption closely resembling scarlet fever or measles. (2) Rashes which may be described as those of "polymorphic erythema." (3) Purpuric patches. He produces evidence which suggests a probable relation of cause and effect between gonorrhea and those of the first group. The eruptions come on for the most part late in the stage of the decline of gonorrhea, last about twenty-four hours, and are followed by furfuraceous desquamation; they are often associated with severe gastro-intestinal disturbance, and can hardly at first be distinguished from the rash of measles or scarlatina. The second group is distinguished from the copaiba rash by (1) absence of the itching often present in that affection; (2) by the knotty appearance of the erythema; and (3) by the appearance of successive crops of eruption. The evidence in favor of the outbreak of purpuric patches does not seem so satisfactory. Some of the cases are probably those of peliosis rheumatica occurring in patients suffering from gonorrheal arthritis. M. Mallet rejects the reflex and pyemic theories of the origin of gonnorrheal rheumatism and the cutaneous manifestations, and argues strongly in favor of the absorption of a specific gonorrheal virus.

Incompatibility of Chloral Hydrate with Potassium Bromide and Alcohol.—According to the Boston Medical and Surgical Journal Professor George F. H. Markoe, in experimenting with solutions of chloral hydrate finds this drug incompatible with bromide of potassium and alcohol. He says: Experiments prove that the alcohol is the cause of the trouble, and the writer thinks that the chloral hydrate is changed into the less soluble chloral alcoholate. The writer found that the addition of potassium bromide, sodium bromide, sodium chloride, and magnesium sulphate to strong solutions of chloral hydrate, together with the presence of alcohol, determined a separation of the liqnids into two layers. Ammonium chloride, ammonium bromide, potassium nitrate, and calcium bromide did not disturb the same chloral solutions. The practical lesson to be learned from this incompatible prescription is that alcoholic preparations should not be prescribed with chloral hydrate, especially not in connection with the bromides of potassium and sodium, because if concentrated solutions are used the chloral will separate as alcoholate, float on the surface, and a great risk will be incurred of giving a large overdose, the patient having received no caution with regard to the necessity of shaking the contents of the bottle before taking a dose.

Nerve Suture, with Immediate Restoration of Function.—One of the most remarkable results of the suture of a nerve ever reported is given by Surmay, in the Archives Gén. de Médecine, for October, 1885. The Medical News writes thereon as follows: The case was that of a man who had received a cut above the wrist, resulting in abolition of the function of the median nerve. For some time no attempt had been made to correct the defect. Then electricity was tried without result. Six months after the accident, Surmay resected about three-quarters of an inch of the nerve, and joined the cut ends with a fine carbolized catgut thread, which had been ingeniously inserted before the intermediate portion was cut out. The function of the nerve was re-established within twenty-four hours! The parts which had before been affected—the second phalanx of the thumb and

the two terminal phalanges of the index and the middle fingers—were found to have wholly recovered their general and tactile sensibility, while the sensibility to pain and temperature had returned in the thumb and in the upper half of the phalanges of the other fingers involved. Complete restoration followed after several months.

This remarkable case furnishes a strong support to operative interference in other cases than those in which loss of function results from traumatic division of a nerve; for in this one the nerve was not found divided, but the part under the wound was occupied by an enlargement which was formed by pure hypertrophy of the neurilemma. It is always surprising that the cicatricial changes which must take place in, or immediately adjacent to, a resected nerve, should have so little effect in disturbing the result of the operation. In the case mentioned, it seems to have had some disturbing influence, although this passed off with time. Further, this case is interesting as raising questions in physiology which will bear close study, namely, as to the reinstatement of one part of the function of a nerve while another remains in abeyance, as well as in regard to the relation of the different forms of sensation which are commonly divided into: common sensation or sensation of pain, and the tactile sense, which includes appreciation of changes in temperature. As Surmay's case seems to have been studied with great care, and to present many of the conditions of scientific accuracy, it may contribute materially to our knowledge of the physiology of the nerves.

Treatment of Fracture of the Thigh in Children by Means of the "Steadle-Splint."—S. Wilson Hope, Petworth, Sussex, says in the British Medical Journal: By the steadle-splint, or crib-splint, is meant the using a steadle, bedstead, or crib, for the purposes of a splint, namely the extension and counter-extension; and any further appliance for setting, or coaptation, may be omitted, with good results. One method of using it which answers very well, is this. From an ordinary bandage cut such a length as, when folded in the middle, will reach from the lower ribs of the child beyond the top cross-piece, forming part of the frame-work upon which the mattress rests, whether it be the framework of an iron bedstead, of a crib, or of an old wooden steadle, take two such lengths, and lay them singly not doubled, along the sides of the child's chest; and pass round the chest, under the arm-pits, and over the bandage-lengths, an ordinary rib-roller. On bringing up on the outside of the roller the other ends of the bandage-lenghts, there is on each side of the chest a loop of bandage, with the rib-roller lying in the loop. Let the upper and the under portion of the bandage be secured separately by thread or safety-pins to the upper edge of the rib-roller, and at such points that the under part goes under the shoulder, and the outer part over the shoulder, without dragging. Adjust the child's head and pillow, and fasten the bandage-length to the top cross-piece, which forms part of the framework upon which the mattress rests. And one has only to raise the feet of the bedstead upon bricks, when the arrangement for counter-extension are complete. Cover the ankle thickly with wadding, and, having taking a loop-length of bandage, long enough to reach from the angle, beyond the bottom cross-piece, forming part of the framework which supports the mattress, tie the bandage round the ankle, with the knot at the back, above the heel; make extension, and secure to the bottom cross-piece. All that remains is to keep the foot in position by means of bandage-lengths passing round the foot, and fastened to the side-pieces of the framework; and the thigh is set. The main use of such a plan as this is that, in whatever out-of-the-way house one finds a child with a broken thigh, there, also is the steadle-splint.

But, besides, the following points might be mentioned in its favor. 1. It avoids all trouble consequent upon perineal bands in children. 2. The counter-extending bands over the shoulder check both forward and turning over movements during sleep, as well

as when awake. 3. In permitting the omission of special setting splints and all bandaging, it adds to the comfort at the time and throughout the treatment.

Congenital Syphilis.—Neumann, in an elaborate bibliographical and clinical study of congital syphilis (Wien. Med. Jahrb.—Medical News) reaches the following conclusions from the facts presented:

1. The usual opinions regarding the effects of syphilis of the father are confirmed.

2. Recent syphilis of the mother, at the time of conception, induces disease of marked intensity in the product of conception.

3. The longer the duration of the syphilis of the mother the less is the danger of the progeny, and the more favorable is the action of specific treatment.

4. Tertiary syphilis, on the part of the mother, has no direct influence upon the power of conception, impairment of this function existing only as a result of gummata of the uterus or ovaries.

5. Syphilis acquired after conception is rarely shared by the product; immunity from such transmission, however, does not exist. The period of pregnancy in which syphilis is acquired does not appear to affect the frequency of transmission to offspring. Syphilis acquired after conception is more dangerous for the subsequent offspring than for the fetus at that time in utero.

6. The possibility, but not the certainty of transmission of syphilis from the fetus to the mother (choc en retour) is admitted. No data have been obtained as to the month of pregnancy in which this occurs.

7. Hereditary is highly contagious for every one except the mother.

8. No absolute laws of inheritance of syphilis can yet be formulated.

The Powers of the Illinois State Board of Health.—To our regret we note that the efficiency of the Illinois State Board of Health is much threatened. Judge McAllister recently delivered the opinion in the case of Lucas R. Williams against the people and others. Williams was indicted in the criminal court for the alleged violation of the act regulating the practice of medicine in Illinois. He pleaded guilty, was tried, convicted, and sentenced to pay $50 fine. He appealed the case upon the claim that he graduated at Rush Medical College, February 16, 1875, while the act was passed May 29, 1877, and that consequently the act did not apply to him. The Board of Health granted him a certificate after the passage of the act, but subsequently, in 1880, revoked it. The appellant court reversed the judgment of the court below and remands the case. It holds that the statute of 1877, being penal, must be construed strictly. The State Board of Health was not a judicial body, and its powers did not exceed those conferred in the act. Under it its only powers related to those physicians having diplomas and those having none. As to the former, its only duty was to verify the respective diplomas and identify the persons claiming them. As to non-graduates the Board had unlimited power. The right of the Board to revoke diplomas went only to those who had certificates after examination. Williams had a diploma, and the Board had no right to revoke his certificate. The legislature could not have intended to invest the Board with an absolute power over the reputations and fortunes of graduates of medicine, as no notice or right of appeal was provided for. It never intended that the Board should, by a fiat, say who should and who should not practice, and strip them of the value of years of study. The case was therefore remanded.

A Specific for Whooping-Cough.—Dr. Sauerhering, Stettin, claims to be able to cure whooping-cough in from fifteen to twenty days by the use of quinine. This is not a new form of treatment for the disease, but Dr. Sauerhering maintains that his method of giving the drug is the explanation of his success. The following account of his method is taken by the Northwestern Lancet from the Therapeutic Gazette

Infants receive, pro dosi, ½ to 1 grain; children in the second year of life, 1½ gr.; in in the third and fourth, 1½ to 2 gr.; in the fifth and sixth, 2 to 3 gr.; in the seventh and eighth, 3 to 3½ gr.; adults 6½ gr.; these doses of course are subject to modifications in correspondence to special conditions of constitution, physical development, or other circumstances. It is best to prescribe ten doses at once, in powder form, and to order one powder to be taken three times daily,—i. e.

℞ Quinæ sulphatis, gr. iss.
Sacchar. alb., gr. viss. M.

F. pulv. disp. cht No. 10. S.—One powder three times daily.

These three doses suffice for three days, then a pause of three days is to be made, and ten more powders are to be given in the same manner. Then the same pause and successive administration of the medicine ensues, but now for the last time, as the whooping-cough is usually cured by these thirty powders, taken in sixteen days, including the pauses. Fresh air is to be supplied as freely as possible; excitement, dry or crumbling food are to be strictly avoided. The following table will represent the mode of administration still clearer:

Aug. 11 " 12 " 13 " 14	One powder in the evening. Three times daily one powder. First prescription.
" 15 " 16 " 17	First pause. One powder in the evening.
" 18 " 19 " 20	Three times daily one powder. Second prescription.
" 21 " 22 " 23	Second pause. One powder in the evening.
" 24 " 25 " 26	Three times daily one powder. Third prescription.

After the use of the first ten powders the vomiting will be found to have ceased, though the reduction in the number of paroxysms is only slight. Both intensity and number of attacks decrease after the use of the second series of powders, while vomiting is wholly suppressed, the bloatedness of face and the echymosis of the conjunctiva disappear. Even if the affection should seem to have been relieved or cure before the above treatment is completed, it is necessary to carry the latter out with strict adherence to the indicated plan.

Though children at first refuse to take the bitter powder, they soon learn to take it, and, as our author remarks, with less repugnadce even than adults. The powder is best dissolved in sweetened water, or given in chocolate, which almost completely disguises its bitter taste.

As to the therapeutic rationale of this treatment, Sauerhering thinks that quinine acts in whooping-cough similarly as in the malarial affections, viz., by virtue of its antibacterial properties. Besides, it is quite likely that the favorable impression on the reflex centres by the drug (as in the case of the narcotics or of the bromide of potassium) is one of the factors which render quinine a cure for whooping-cough. The digestive tract remaining unimpaired in the experience of our author, we feel assured that his treatment will receive a fair trial from American practitioners.

THE MAN WITH INTERSTING CASES.—The New York Medical Record must have had a very severe infliction of the interesting case man when it wrote:

" The young medical man who launches his (largely Peruvian) bark upon the unhealthy seas of medical practice has many discomforts, obstacles, and dangers to encounter. Not the least among the minor ills—to drop our meritorious but ancient simile— is that of the man who always has a case to describe.

Some distinguished medical philosopher has remarked that he would rather be knocked on the head at once, than be stopped on the street and be told about a case. This gentleman evidently had had some painful experiences, which perhaps warped his judgment a little; for, after all, to be knocked on the head is not only disagreeable but serious, while the

man with the case is a depressive force rather than a destructive one.

Every one knows him, however, this man with many cases; he meets one at the street corner, at societies, he drops in at the office. He greets his victims with a pleasant "Good-day-how-is-practice-last-night-I-was-called-to-see-a-" etc., manner, and in a moment he is in the midst of bedside details of anguishing minuteness. One listens in a dazed way, catching now and then something about "injections," "temperature," "bowels," "bladder" and similar expressions; while perhaps the speaker ends temporarily with an explanation of why he called some other gentleman in consultation.

The case-fiend penetrates every stratum of society. To tell the story of his experiences with unhealthiness, is to him a kind of erotic joy. His cook, his wife, his druggist, the poor, the rich, the sick, the well, all get a share of his case-book. He drops into a case-recital as easily as Joseffy into a sonata, or a premiere danseuse into a pirouette; his intellectual life is in the verbal revival of his pathological experiences; of these he is a word-painter, pre-Raphaelitic in detail, persistent in purpose, and exhaustless in resource.

He is seen at societies, and here he acts as a dispersive force of singular potency upon members; and respectable gentlemen of our medical profession of high standing and large practice will steal on tip-toe out of side-doors, like thieves in the night.

But it is, after all, in his private relations that the man of cases is at his best; and the question of what shall be done with him is a medico-social problem of deep interest.

For our part, we urge upon these gentlemen a prompt reform. We would assure them that in many departments of medical knowledge clinical recitals can add nothing, and that in some directions the end of clinical research has been nearly reached. This should make these more than Roman viaducts of bed-side studies very careful. They should reserve these exercises of their memories, and cultivate somewhat more their logical faculty and the powers of interpreting the meanings of things. This beside tattle of "cases" is too often the same kind of stuff as the gossip of a ladies dressing-room."

Onomatomania.—In a report on the Progress of Psychological Medicine (New York Medical Journal) J. Leonard Corning writes: Charcot and Magnam ("Archives de neurologie") have, under this somewhat formidable designation, drawn attention to a series of mental symptoms in which a name or a word plays a prominent part. In order that the preoccupation with the word shall attain such dimensions as to provoke positive anguish, and that such preoccupation shall repose upon an urgent active seeking after the word—upon a possession, an impulse—it is, of course, necessary that the psychological substratum should possess particular attributes. This assemblage of conditions, like that present in folie de doute, perversions of the sexual feelings and inversion of the latter, fear of pins, dipsomania, etc., can only be developed in those who are predisposed. "All these conditions, so numerous and so variable, confounded under the designations of insanity with consciousness, reasoning mania, mania without delirium, pseudo-monomania, etc., are only psychical stigmas of hereditary insanity." Moreover, these episodical conditions may be determined by the most trivial causes; the remembrance of a trifling incidental circumstance may give rise to the agonizing search after the name. In order to thoroughly appreciate the part which the word is capable of playing in the preoccupations of those afflicted by hereditary predisposition to mental weakness, it is necessary to examine the principal conditions to which it may give rise: "1. The harrowing search after the name or the word. 2. Continuous besetting of the mind by the word which imposes itself, with an irresistible impulse to repeat. 3. The particularly portentous significance of certain words occurring in the course of conversation. 4. The preservative influence of certain words. 5. The word becomes a veritable solid body to the patient, inadvertently swal-

lowed, pressing heavily upon the stomach, and capable of being rejected by expectoration."

CONTRIBUTIONS.

COMPOUND FRACTURE OF THE SKULL.

BY L. D. BROSE, M. D., PH. D.

Read at the Mississippi Valley Medical Society.

The little boy that I intend showing you, while playing in the street, was kicked by a work horse wearing a heavy, rough iron shoe. He was picked up wholly unconscious, with bleeding from the seat of injury and taken to his home near by. I saw the child with Dr. W. D. Babcock about one hour after the accident, and found him still unconscious, with a rapid and feeble pulse, and widely dilated pupils. Beneath the scalp there was much effused blood. Just in advance of the anterior fontanelle there was a lacerated wound, but no fracture of the bone beneath.

Above the right parietal eminence there was another lacerated wound, and a probe introduced here passed readily into the cranial cavity and revealed a single fracture of the right parietal bone, with much separation of the fragments. Our prognosis was that the child would live but a short time, and no further treatment indicated, save cold cloths to the head and a few drops of brandy. Next day the boy had regained consciousness, was able to talk, but had complete paralysis of the left side of the face, the left arm and leg. Above each eye there was a bluish ecchymosis, but no sub-conjunctival hemorrhage. There was fever, with great restlessness and irritability. Ten grains of bromide of potash every two hours was ordered, and the cold applications continued. October 14, the paralysis had disappeared from the left leg and face, but remained in the left arm. He vomited at times; otherwise his general condition remained as on the preceding day. Calomel in small and repeated doses was ordered until the bowels were moved.

On the 15th and 16th he continued improving, and on the morning of the 17th, although there was still palsy of the left arm, the temperature became normal. October 18th, he had a chill, followed by high fever and a very rapid pulse. It was now decided to make an exploratory incision to liberate retained pus and to elevate depressed bone if any could be found. With Dr. Babcock's assistance, the opening in the scalp communicating with the fracture was enlarged by an incision carried downward parallel with the fibres of the temporal muscle. Considerable blood was lost on this incision, from the fact that the middle temporal artery had been longitudinally divided. A second incision was started from the middle and carried directly forward along the line of fracture ending about the middle of the coronal suture. At this point a piece of depressed bone, broken from the right parietal, was found and removed with forceps, after first severing adhesions with the dura mater. The fragment removed embraced both tables of the skull, was wedge-shaped, with the apex posterior, and about two inches in length. Much pus escaped from the cortex of the brain after this incision. A third incision, joining the beginning of the last one, was carried backwards to within a short distance of the lambdoidal suture to a point about two inches below the posterior fontanelle, liberating more pus and broken down cerebral matter. With the finger the entire length of the fracture could now be explored, extending from the middle of the coronal suture in front. backward through the middle of the right parietal bone to the lambdoidal suture and with a separation of this suture upwards to the posterior fontanelle, and extending for some distance between the left parietal bone and its articulation with the occipital bone. The separation along this entire line was as much as half an inch, and that in the right parietal bone was due to an outward bulging of the lower fragment. Strands of hemp were used for drainage, and the wound brought together over this by the interrupted silk suture. Our patient was now pulseless at the wrist and blanched from loss of blood. Ether had been used during the operation. A hypodermic injection of atropine was administered and the boy placed in a warm bed. During the night he revived, became very restless, and by accident was permitted to remove the hemp drainage.

October 19.—His pulse was 160, and paralysis had again occurred in the left leg. Suppuration continuing freely the stitches were all removed and the wound treated openly.

October 20.—The brain matter has now protruded through the fracture, rising up above the scalp, and forming a large hernia cerebri along the entire length of my incision over the parietal bone. The paralysis in a few days disappeared from the leg and his general condition improved until the 27th day of November when he again had a chill,

followed by frequency of respiration and a temperature of 103°. An incision was made into the separated lambdoidal suture over the fracture in the posterior part of the right parietal bone, but no pus was found.

November 28.—He feels sick, has severe bronchitis and a pulse of 130.

November 29.—Pulse 160; patient complains of headache and chilliness and has a temperature of 101°.

December 1.—Temperature 100½°; pulse 132. Calomel ordered in small and repeated doses to open the bowels. During the night there was a separation of a scale of bone and a sudden discharge of matter from within the cranium. Next day, temperature normal, and paralysis has disappeared from both the leg and arm, leaving the muscles very weak. He was out of bed now every day until December 14, when he fell striking a chair with the occipital bone near the seat of fracture. Considerable bleeding occurred through the wound and the child became sleepy; remained so throughout the next day until towards evening, when fever occurred, and for the first time irregularity of the pulse.

December 16.—The pulse intermits every six or eight beats; temperature 98. The muscles are gaining strength slowly, so that he can walk across the room with simply some staggering. This also disappeared in the next week, and the hernia cerebri was destroyed by daily application of a ten grain solution of nitrate of silver.

January 13.—Removed a piece of the outer table of the anterior third of the upper fragment of the parietal bone.

January 24 and 30.—Removed scales of bone from the middle third of the same fragment.

February 12.—Ether administered and a long piece of the outer table of the posterior third of the upper fragment of the parietal bone was removed. The anterior half of the fracture is closed by a thin soft tissue that pulsates synchronously with the respiratory act. The rest of the fracture was gradually closed by a similar soft, bluish tissue, and the boy fully recovered his former strength and activity. By actual measurement an opening in the skull still exists five and three-fourths inches long, three-fourths of an inch wide, in the middle of the parietal bone. The pulsation of the brain is distinctly seen through the cicatrix. This case is certainly proof that the brain is an organ tolerant of severe injury and that it can readily take on reparative process. It also permits of the bringing up of the subject of trephining, and it is more especially to elicit from the members of this society their experience in the operation and their views in regard to the indications for its performance that I have presented this paper. All authorities agree that we perform trephining for brain compression of some sort, but when we come to the proper time for its performance there exists great diversity of opinion. To corroborate this last statement, I will quote from two recent papers on this subject, one by a neurologist, the other by a surgeon.

Dr. R. W. Amidon, of New York, in a contribution entitled "A Plea for more Heroic Surgical Interference in Affections of the Brain," published in the "Medical News," says that he considers as good indications for opening the skull, an injury of the vault, however slight the marks of external violence, provided there be coma, aphasia, hemiplegia or hemispasm of the lower part of the face, of the arm, or leg, or all three, constituting hemiepilepsy, whether or not accompanied by chills, fever, headache and vomiting; general epileptic convulsions do not constitute so good indications for operation; every case of compound fracture of the skull, whether there be cerebral symptoms or not; cases in which, after the lapse of months or years even, unmistakable symptoms follow an injury to the head; atrocious and incurable headaches, particularly if localized, aphasia, monoplegias and monospasms, hemiplegic or hemiepileptic seizures, or general epileptic attacks, if they have an aura pointing to a localized lesion. In addition to the bone, the dura mater should be opened, in all cases in which exploration with a hypodermic needle discloses the products of purulent inflammation or a great deal of fluid under it. In all cases in which a serious lesion of the brain is suspected, but cannot be otherwise proven, in addition to the bone and dura mater, the brain should be explored delicately with a probe, in all penetrating wounds of its substance, punctured, lacerated or gunshot. Its mass should be invaded, even when superficially intact, by a fine, blunt exploring needle, when the presence of foreign bodies or hidden collections of pus are suspected, and, for the extraction or evacuation of such, larger openings should be made with a dull instrument. Finally accessible neoplasms of the brain which have resisted medicinal treatment and which continue to grow and threaten life, should be removed for the reason that they are generally single, seldom have secondary deposits, are surrounded by an inflammatory zone of demarcation, and always kill by pressure.

Dr. Henry B. Sands, in a paper entitled, "The Question of Trephining in Injuries of the Head," also published in the "Medical News," says that on the whole it appears that the apprehensions felt by those who advocate preventive trephining in cases of simple depressed or comminuted fracture of the cranium, without head symptoms, are scarcely justified by observation. If our means of diagnosis were more exact, and if we were able to predict what cases would turn out badly if left to nature, active interference would often be an obvious duty, but in the absence of such knowledge it seems unjustifiable to subject the patient to an operation which must convert a simple into a compound fracture, with its attendant danger of suppuration in close proximity to vital parts. The course which should be pursued in cases of simple fracture of the cranial vault, accompanied by head symptoms, is by no means easy to decide. It has been clearly shown that in severe cases of simple depressed fracture, accompanied with marked and prolonged signs of compression of the brain, other lesions usually exist, such as contusion or laceration of the brain or hemorrhagic extravasation, which may take place between the dura and the skull, in the arachnoid cavity, in the substance of the brain, or on its surface from the vessels of the pia mater. If we except these rare instances in which the compression is due solely to an extravasation between the dura and the cranium, we shall have no reason to expect that benefit would result from the application of the trephine. The damage the brain substance has received is beyond the reach of mechanical aid; its integrity, if restored, will be slowly regained, as in cases of ordinary apoplexy, by absorption of the extravasated blood. And the same process goes on in favorable cases when blood is effused upon the surface of the brain. The very facts which have been urged as affording an indication for the employment of the trephine in cases of simple fracture may, in my judgment, be used as an argument against the propriety of the operation. I refer to the gravity of the injury and the severity of the symptoms. Where the fracture is of great extent and accompanied with severe contusion or laceration of the brain, or with copious intra-cranial hemorrhage, it is extremely doubtful whether the trephine can ever be employed with advantage, while the operation must by increasing the mechanical injury, and by favoring the occurrence of suppuration, add not a little to the already existing danger which threatens the patient's life.

There are two conditions, however, either one of which, when present, render imperative an immediate resort to the trephine. One is where the fracture is of limited extent, and where there is reason to think, from its situation, or from the occurrence of monoplegia, monospasm, or hemiplegia, that a splinter from the inner table may have penetrated the motor tract of the cerebral cortex. The other case is the one in which compression is caused by an accumulation of blood between the dura mater and the cranium. Such an accumulation may result from a wound of the large venous sinuses, but in a large majority of instances it depends on a wound or laceration of the middle meningeal artery. The accident is most frequently accompanied by a compound fracture, but it may be met with in cases of simple fracture, and occasionally when no fracture is present. In compound fracture, while believing that trephining is to be recommended while the depression is marked, but of not great superficial extent, and in all cases of punctured fracture where there is reason to suspect that the internal table is extensively splintered or depressed, I am strongly opposed to active interference where the fracture is of great extent and where the depression is not limited or abrupt. It is true that these cases are usually fatal, but I am sure that nothing can be gained by the extensive operative procedure that would be involved in any attempt to remedy the displacement.

Aside from those cases in which the brain has suffered irreparable damage, I think that in future many successes will be obtained by careful antiseptic treatment of the wound, such as is recommended by Lister in the management of compound fracture of the bones of the extremities.

Discussion.

Dr. Wm. Byrd, of Quincy, Ills., discussed trephining. He advised to trephine early where the bone was projecting down into the brain. Do not let it set up inflammation. He has had very good results with the trephine. The last ten years have changed considerably and materially the surgery of the brain and skull.

Dr. Bauer, of St. Louis. The fact is simply reduced to this question: Is there any pressure mechanically removable. We hung a man four years ago in St. Louis. The body was exhumed and carefully examined. The head was found smaller than the age and development would warrant. The brain was found asymmetrical, flattened on one side, also premature ossification of the sutures of the skull The man was evidently in a state of

semi-idiocy—irresponsible. He killed a man with a big stone. I am satisfied his hanging was a judicial murder. He reported the case of an epileptic who was very sullen and had other symptoms. Microcephalon was found. He was trephined. Two buttons and the intermediate ridge were taken out. He improved wonderfully, completely recovering his mental and physical health. This is a new rôle for the use of the trephine. I would not hesitate one instant to remove everything which interferes with the movement of the brain. He discussed trephining for osteo-myelitis. What is more reasonable, more rational, than to make a hole to let it out?

Dr. A. W. Brayton, of Indianapolis, said: Dr. Bauer has reported cases which should come before a jury of medical experts. He reported cases from Indiana where judicial murders had been committed by a jury of farmers.

Dr. Joseph Eastman, of Indianapolis, said: How many children who received injury later become epileptics, insane, idiotic, and reach the asylum or possibly the scaffold. We must carefully consider these injuries and not trust too much to conservative surgery. We should consider well, shall we be conservative or heroic.

Dr. Chas. Knapp, of Evansville, Ind., reported a case which occurred in his city. It was a fall from a bridge, a great height and with great force. He was taken up with fracture of the skull and it was found necessary to operate. The child made a good recovery except a slight paresis of the limbs. He thinks if there are symptoms of compression we should cut down.

Dr. H. H. Clark, of Danville, Ills., queried if there were any change in the temperature of the boy.

Dr. Brose replied that he had found none.

Dr. Clark advised that the child be carefully watched for a few years.

Dr. Brose in conclusion said that he had hoped some one would discuss the subject of cerebral localization. He explained that there was danger of a depression of the parietal bone on pressure in this child.

TWO CASES OF CHLOROFORM POISONING WITH RECOVERY.

BY J. SAUNDERS, M. D., ORANGE TEXAS.

Read at the Mississippi Valley Medical Society.

On the 7th of August, 1885, at 11 A. M., Miss Florence P., a domestic in my employ, on being informed that she would have to find another place, (as she had shown evidence of mental alienation) determined to carry out a previously implied threat of suicide, and procured from my office a vial containing one and one-half ounces of chloroform, the contents of which she swallowed. Within three minutes time thereafter she commenced screaming violently, and after vomiting went into an unconscious condition, during which I was sent for. Dr. W. W. Cunningham accompanied me, and we found her with stertorous respiration, almost pulseless and pupils contracted to their utmost capacity. The vomited matter consisted of fresh, ripe peaches, and barely had the odor of chloroform—the vial which contained the chloroform was found under her upon the floor. The treatment was artificial respiration with hypodermic injection of one-tenth grain apomorphia. The apomorphia not readily acting, fifteen minims of sulphuric ether were given hypodermically. The ether immediately brought the pulse perceptible, and emesis took place. As soon as she could swallow, one dram of spirits ammonia aromatic, sufficiently diluted, was given by the mouth. Through the day, for the irritable stomach, crushed ice was given to relieve the vomiting, saccharated pepsin having failed. The following night she became very restless, tossing about to such a degree that at midnight I gave her a hypodermic of morphia, gr. one-eighth et. atropia gr. one-one-hundredth, which was immediately followed by rapid jerking respiration, which in a few moments suddenly ceased with a few sighs and a cataleptic condition of a mild form set in. She would then only breathe when told to,and in a few moments would not breathe when called upon so to do; the pulse was now feeble at the wrists. Having a faradic battery in order I then applied an electrode to each hand with a strong current, and each application caused an inspiration to take place; this was used for about fifteen minutes when respiration became regular.

After this no other treatment but crushed ice, for the irritable stomach was employed and the following day at noon she was able to sit up and take milk diet. While conscious and under the impression she would not recover I asked her if she took all the chloroform there was in the vial, and she replied she did and did not spill a drop. (I had the vial in my hand half an hour before she took its contents.) The mucous membrane of her mouth did not appear to be abraded, although the tongue had been bruised by a spoon used to pry the jaws apart while vomiting, as, I failed to state, there was marked trismus.

Mrs. R. H. S., wife of a prominent merchant of this place, on the 15th of August, 1885, at 7. P. M., attempted suicide by swallowing three ounces of chloroform, it being what was left in a one pound bottle, slight inhalations of which she occasionally used for neuralgia. After taking it she informed her husband of what she had done and objected to his sending for a physician. Dr. S. M. Brown was first called in, and he immediately sent for Dr. Cunningham and myself and faradic battery. When I arrived they had induced vomiting by copious draughts of warm water, the ejected matter having slight odor of chloroform. I found her pulseless at wrists; carotids barely perceptible to touch; voluntary respiration abolished, extremities cold to the body, pupils contracted. Fifteen minims sulphuric ether given by hypodermic soon rendered carotid pulsations more visible and pupils dilated slightly. Artificial respiration unremittingly kept up for two and one half hours, while tongue was held forward, brought about volition in respiratory tract. Three different times we feared life was extinct. While the artificial respiration was being made we frequently injected the ether and near the last I injected into the rectum three drams of spirits ammonia aromatic. The sphincters ani were so relaxed I feared the ammonia would not be retained, and in consequence used a compress over the anus. Hot irons to the feet and bottles of hot water to the lower extremities were used. In addition to the above the faradic battery current was frequently passed from the subauricularspace to the scrobiculus cordis. Respirations regular without assistance, at twelve, midnight; and at six A. M. following, she became rational when irritable stomach set in. We were not able to induce action in the diaphragm, probably from the sponge electrodes not being suitable, but believed we got a general stimulating effect from the current. In the morning she vomited a small quantity of blood, once only. Had iced milk and port wine. Convalescence required one week. She is supposed to be pregnant, as it is said she threatened to destroy herself as soon as she knew conception had taken place. Her feet and limbs were badly blistered from the heat I employed and the low vitality of the parts.

COMMENTS.—In the case of Florence P. the apomorphia did not act until the ether was injected. In both cases the stimulating effects of the ether appeared in a few moments and lasted from twenty minutes to half an hour. The apomorphia was not used with Mrs. S. as she had vomited freely when I arrived. In the matters vomited in both cases the chloroform was hardly perceptible. During convalescence the matters vomited had an ethylic odor. In the breath of each patient no chloroform could be detected at any time to a marked degree. The lowered vitality in extreme cases allows the tissues to be readily injured by undue heat applied to the parts. In the early stages in both cases the pupils were contracted during stertorous respiration, while later they dilated. No gastritis followed in either case. Even the lips and mouth were not burned. What became of the chloroform swallowed, as the vomited matter did not show the presence of much? Was it during the act of vomiting thrown into the duodenum and there absorbed? In the case of Florence P. did the atropine, the morphia, either, both, or neither, cause the disturbance in her respiration? Two hours and a half of unremitting artificial respiration with tongue held out in the case of Mrs. S. was required and rewarded.

CLINICAL LECTURE.

A CASE OF TYPHOID FEVER.

A Clinical Lecture Delivered at the New York Hospital.

BY WM. H. DRAPER, M. D.,

Prof. of Clinical Medicine in the College of Physicians and Surgeons, New York.

You will remember this patient, gentlemen, whom I showed to you a week ago to-day. You will remember that he gave a history of fever of eight days duration before you saw him, and I told you that from the appearance of the patient, from the very high temperature that he had had since he came into the hospital, from a pretty general eruption which was of a livid color and which did not disappear entirely under pressure, I suspected that the case might be one of typhus. I told you, however, that I preferred to reserve my opinion, that in some cases the eruption in typhoid fever appeared before the seventh day, and furthermore, that it was not possible to fix exactly the day upon which the fever began. I told you that the color of the eruption in typhoid fever might simulate that of typhus, and I told you that nothing could be told about the eruption until we could test its duration; that in typhoid eruption we had a crop, a succession of lenticular spots. These would last only three or four days and would be succeeded by others, while in typhus the eruption was permanent.

We tested the duration of these spots and found that some of them disappeared and others did not. But after a few days the character of the fever manifested itself more exactly, and I show you here a trace from which those of you who are familiar at all with the course of fever in typhus and typhoid would be able to locate this one. We have a gradual descent; this man, on the fourteenth day of his disease, has a subnormal temperature.

When you saw him a week ago, he had a temperature of 105° in the evening. The next day 104°; next day 104°; next day 103°; next day about the same; then came a fall to 102°; then a fall to 100°; then a fall to 99°, and this morning a fall to 98°. There you see in the second week of the fever a gradual subsidence.

This is a somewhat unusual history of typhoid fever, i. e., if we are correct in estimating the time at which his disease began. But I suspect that we are not. I suspect that he was really ill with this fever before he gave up work, which is not at all unusual.

Patients usually work and keep about during the first week of typhoid, and you do not see them until the second week. It is unusual for the defervescence to occur before the third week; sometimes it is deferred to the fourth, fifth and sixth weeks.

If I remember rightly, this man gave a history of an attack of illness five weeks ago. It is possible that during all this period, the man has had some fever, and that this was really an acute relapse. Such a thing is possible; but the one thing I feel certain about is, that this is not the fourteenth day of his disease. It is much more likely to be the twenty-first. When you saw the patient, he was very feeble, and his feebleness manifested itself in his pulse which was exceedingly soft and compressible. The first sound of the heart, though his pulse was very compressible and feeble, was still moderately distinct.

This is really the practical test that you should apply in estimating the value of the pulse in a case of fever. The force of the pulse.—On listening to the heart we ascertain what the character of the beat is. Sometimes you will find that it is almost lost, and nothing is heard but the sharp click of the aortic valves. When you find that you have lost the first sound of the heart, and especially if you should apply the sphygmograph and find that you have got a secondary wave of very marked degree, showing great feebleness in the aorta, you have the very best motive possible for the free administration of stimulants. There is no better guide than this, I think. This man was put upon large quantities of whiskey since he came in. He began with ten or twelve ounces, and it was rapidly increased to eighteen ounces in twenty-four hours. Under this quantity his pulse improved, and his temperature steadily declined. He has no unpleasant symptom whatever. As the temperature declined and the force of his heart's action improved, the stimulants were diminished, and now he is taking five ounces in the twenty-four hours. He has had no other treatment than that addressed to sustaining the heart's action.

Mitral Regurgitation.

Case II.—Male, æt. 37. Native of United States. Was admitted to hospital two days ago. Never drinks to excess. Never had rheumatism or malarial fever. Fifteen years ago patient contracted a chancre, and afterwards an eruption appeared on the forehead. Had sore shins within a year after chancre. Has had no specific trouble for the last fourteen years.

His left eye was injured five years ago; vision not destroyed. A year ago, in the West Indies, the patient, exposed to the air, took violent cold, considerable pain in the lumbar region; suffered nearly a year with dyspepsia; continued in fair health till one week ago. Nine days ago patient noticed swelling of scrotum and legs, slight doughiness under the eyelids; suffered also from shortness of breath, and felt as if fluid was in his chest when he lay down; slight vertigo and moderate headache for the past few days; no vomiting; pulse usually regular; no chill, no cough, not feverish at any time; never had cardiac pains or palpitations; on admission, pulse 88, respiration, 36, temperature, 100.4°.

The patient's veins are enlarged in the arms and neck. There is a swelling on the neck. The thyroid gland is not infrequently enlarged, more especially in functional than in true organic affection.

It may be that the gland is enlarged and gives great fulness to his throat. You have got sufficient evidence from the character of the arterial pulsation and the obstruction to the venous current to justify you in the suspicion at least of cardiac trouble. The apex here is in the proper axillary line in the fifth intercostal space. The line of precordial dulness is where it should be, in the fourth intercostal space near the third rib, but it is very considerably enlarged.

There is no cardiac thrill; on applying the

stethoscope near the apex the sounds were normal and there were no sounds at the mitral orifice. There is a prolongation of the second sound. This is called the locomotive, visible pulse—Corrigan pulse. It is a very significant pulse. It is a pulse that is almost invariably associated with one of the most important cardiac lesions, namely, mitral regurgitation.

The point of etiological interest in this patient is that he had constitutional syphilis, fifteen or sixteen years ago. I say it is the point of etiological interest, because it is unquestionably a fact that one of the most important and frequent causes of arterial disease is constitutional syphilis. Another point of very great interest in his history is that he has gone on for a number of years with a cardiac disease without its interfering seriously with his work.

When you consider that he has hypertrophy of extreme degree, and when you consider that he has a cardiac lesion which causes very serious obstruction in the systemic veins, this is an extraordinary circumstance. It is, however, an extraordinary circumstance that occurs not infrequently in the history of cardiac disease, and the reason that the patient does not take more notice of the disease as it progresses is that a compensation goes on for many years which overcomes the obstruction and enables the patient to get on. And it is not until the patient reaches that period when compensation ceases that he begins to suffer.

This man has not suffered very much apparently till within two weeks.

When you go into the history of these patients, you will find, of course, that the development of what seemed to be a sudden disturbance is in reality not so sudden. This man has had dyspepsia, evidences which come from an obstructed circulation for some time, but he called attention to his chest within a comparatively recent period. Now I will not stop to discuss the lesion which he has very fully illustrated to day. All I would like to say is that those of you who found a prolongation of the second sound over the apex less distinctly at the aortic orifice appreciated correctly the nature of the case. The signs are such as to indicate a stenosis of the mitral orifice, and I think there is also an insufficiency of the aortic orifice and probably a distension of the aorta itself. For in almost all cases of insufficiency of the aortic valves you get dilatation of the aorta.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated meeting held Saturday, December 19th, 1885, the President, Dr. Atwood in the chair.

Cocaine in Insanity, Particularly in its Treatment.

Dr. A. B. Shaw read a paper on this subject. He considered more especially melancholia. He stated that a short time after the hypodermic injection of cocaine there is exhilaration lasting one or two hours. Great depression then follows, which may be so great as to produce collapse and even death. Besides this the drug produces a sudden stoppage of digestion. Cocaine by the mouth is more liable to produce nausea, but sudden collapse does not come on. Continuous use, in either way, diminishes the desire for food and brings on gastro-intestinal derangements. Another effect on the nervous system is insomnia. Instead horrible hallucinations take place. It was claimed that cocaine would be invaluable in insanity and particularly melancholia on account of its stimulating properties; that the patient would eat better and the cure be hastened. This looks attractive but is not true. Cocaine is devilish in its action; it undermines the mental and physical powers and the moral and intellectual qualities. It ruins its captives socially, morally and financially. It produces insanity in a remarkably short time, if used continuously and in increasing doses. To try to cure insanity with cocaine is as absurd as to cure a scald by pouring boiling water over it. One of the potent causes of insanity, until organic changes set in, is hyperemia. Cocaine produces hyperemia of the brain, and, if continued, hyperplasia. As sure as excessive mental exertion, alcoholic excesses, etc., will cause insanity and the general paralysis of the insane, so sure will cocaine, administered continuously in increasing doses, cause a form of insanity having the same symptoms as general paresis, sleeplessness, carelessness, forgetfulness, emotional mobility, suspiciousness, extravagant ideas, (grandioseness) and attacks of maniacal excitement alternating with melancholia. When we remember that the exhilaration is only transient and the depression which follows greater than before, the futility of using it in melancholia becomes apparent. A patient with melancholia, whilst taking cocaine, attempted suicide three times inside of ten

days and lost his appetite entirely. Patients will state that they have not lost their appetite, but this is not a fact, as they do not eat and lose in weight. Now anything which diminishes nutrition is reprehensible. Again, as much sleep should be given as possible. Here, again, cocaine is contra-indicated as it deprives the patient of sleep and besides produces horrible hallucinations. Nothing can be more supremely ridiculous than to attempt to cure insanity by a drug which not only intensifies the symptoms, but will produce them where they do not exist. The reader concluded his paper by reading various extracts from medical journals giving cases of cocaine intoxication, due to very small doses.

Dr. Lutz had had but a limited experience with cocaine in these affections. He had employed it in two cases of melancholia. In one case it produced an aversion to food and he could see no improvement. He found that its claims as a curative agent, in insanity, are delusive. He thought, however, that it had materially benefited one case of dipsomania which he treated.

Dr. Hughes had some experience with cocaine. He never supposed it to be a specific for melancholia, so that he was not disappointed. He found it to be a very evanescent exhilarent, as much so as ether. Cocaine is a stimulant to the nerve centres, tranquillizing many patients, however, in a manner similar to opium, but not as prolonged nor satisfactory. He detailed a case of melancholia made worse by giving cocaine which overexcited the psychic centres. It may be used to counteract the symptom of depression; but, it leaves behind it a depression which is marked. He had not used it much, as he had very little faith in it. In treating melancholia we have a depression varying from a simple neuratrophia of the cortex to irreparable degeneration of the cells of the cortex. Cocaine has no reparative power; it only excites into increased activity quiescent cerebral cells and acts pleasantly on the cerebrum. It does no good in melancholia, which is always a serious trouble and the forerunner of cerebral degeneration. No single remedy will prove snfficient in its treatment. Opium is the best single remedy that can be used, and yet no one has tried to maintain that it is a sine qua non, without a reconstructive course. What is true of melancholia is equally so of alcoholism. We should also be careful in the use of cocaine. The numerous reports of toxic effects following small doses should serve as a warning.

Dr. Love had but a limited experience but it was not favorable. In three cases of dipsomania and two of the morphine habit he did not get any good results. He thought such cases needed restraint, and the only successful method of treating them was in asylums.

Dr. Atwood said that cocaine was a powerful agent and curative. He did not see that it ought to be discarded because idiosyncrasies existed. He had taken two and a half grains without experiencing any effects whatever. It was to be expected that a reaction against it would take place, after all that had been said in favor of it. He had had but a limited experience with it. He had treated six or eight cases of the morphine habit, and there was not one who did not acknowledge receiving some benefit from it. Of course, he knew that they were habitual liars. In a case of chronic alcoholism. he had observed great improvement already.

Dr. Dibble had seen no bad effects follow its use in his practice. He used it almost entirely in applications to the eye, but had not seen panophthalmitis or sloughing of the cornea follow, as some have reported.

Dr. Bremer thought that more evidence was necessary before the question could be settled. His experience in its use was not large. He had used it in melancholic stupor. It acted well, but as the attack came on suddenly in a young girl, through a mental shock, it was not a test case, as melancholia may leave suddenly in such instances. He had observed favorable effects following its use in two cases of alcoholism. One case, however, returned to liquor and claims that the cocaine prevents the unpleasant effects following his potations. In a case of the opium habit, the patient claimed to have been cured, but Dr. B. accidentally detected him buying morphia, and upon inquiry found that he had never left off. In some cases of melancholia which refused to eat, the administration of cocaine caused them to eat. As to their ultimate fate he could say nothing as they were discharged from the asylum as cured. He thought that in order to reach good results it ought to be given in good doses. He was of the opium that there was a great tendency at present to be "down" on the drug.

CHICAGO MEDICAL SOCIETY.

OFFICIALLY REPORTED FOR THE REVIEW.

Stated Meeting, December 7th, 1885. The President, C. T. Parkes, M. D., in the Chair.

Pneumonic Abscess

was the title of a lengthy and instructive

paper by Dr. Edward F. Wells, of Minster, Ohio. He incorporated in his paper the histories of a number of cases which recovered under expectant and medicinal treatment. In an experience with 413 cases of pneumonia, abscesses occurred nine times. In closing his paper, the author said that he had arrived at the following conclusions;

1. The issue of pneumonic fever in abscess is rare, but this rarity has been greatly overestimated.

2. These abscesses vary much in size, and are most frequently found at the base of the lung.

3. They may in some instances, after pneumonia, be caused by excessive jarring or other motion.

4. They are usually formed rapidly.

5. In some rare instances the purulent contents may degenerate into a cheesy mass, to again soften, liquefy and be discharged.

6. The symptoms and signs are quite distinctive and sufficient for an accurate diagnosis.

7. The majority of cases recover, but in a certain proportion a cure is impossible.

8. Expectant and medicinal treatment, thus far, has given the best results, and the majority of cases should be managed upon this plan, but under certain conditions, the most radical measures for relief are not only justifiable but imperatively demanded.

Dr. Christian Fenger said that an interesting point in the paper is that the author takes the ground of the clinical and, perhaps, conservative man. Dr. Wells claims that we should not operate on the small abscesses, but only on large ones as the latter are the more dangerous. Dr. Fenger believed that we should operate on all of them when indicated. Buhl, in Christiana, has operated on nineteen cases in which there were cavities. Up to the present time we have reports of about thirty cases in which operations have been performed, but only seven of these cases have been such as reported by Dr. Wells, or abscesses incident to pneumonia. Since there have been only seven cases of abscesses of the lungs incident to pneumonia, it stands to reason that these cases were severe ones, and that the abscesses were large. Dr. Fenger did not believe there had been much operating on small abscesses as yet; however, he would advocate it in case these abscesses were accompanied by a fetid bronchitis. There is an abscess-cavity, which Rokitansky calls a chronic abscess, in which there is not connective tissue enough to allow the cavity to close. This cavity is a source of danger to the patient, as sometimes, for one reason or other, septic micrococci gain entrance, acute inflammation or gangrene follows, and the patient dies. In such a condition, we should try to obliterate the cavity. Operative treatment of these abscesses has been so infrequent that we cannot say that it possesses any advantage over medical treatment. The important point to be decided in the future is how to get an understanding of where the danger-line is; how long we can afford to wait and how much strength can we afford to let the patient lose before we operate? It is, perhaps, well to put in a word of warning against operating too early, as we are all aware that patients who recover without an operation do better than those on whom there have been operations. Dr. Fenger said that, in case a cavity gives rise to fetid breath, frequently a fetid bronchitis is developed, and subsequently an intralobular pneumonia in the other lung, or in the upper part of the lung in which the abscess exists. Relative to Dr. Wells remarks that he never suppresses the cough, Dr. Fenger stated that it is a fact that the cough ceases almost instantly after the abscess is opened.

Dr. R. Tilley said that he could not see of what benefit inhalations of turpentine could be in such cases, as the abscesses are analogous to those which occur in the more external portions of the body, and we never expect to benefit them by using turpentine. He would expect better results from administering this medicine internally, as he had recently read that the German physicians are using turpentine very successfully, by giving it internally, in diphtheria.

Dr. Wells, in closing the discussion, said that he wished to recall the attention of those present to the important point that these abscesses occur most frequently in the lower lobe of the lung, similarly to pneumonia. The principae object of his paper was to do what he can to counteract the tendency among the medical journals to advise early operation in pulmonary abscesses. He thought the statistics, so far, do not prove the operative treatment to be superior to the expectant and medicinal treatment, and he thought surgeons were too prone to take the cases into their own hands, and that they do not leave enough to the vis medicatrix naturæ.

A Case of Expulsion of a Large Sub-mucous Fibrous Tumor of The Uterus, per Vias Naturales, or Colpo-Myomotomy,

was the title of a paper read by Dr. J. H. Etheridge. Mrs. A. B., aged 43 years,

married twenty-eight years, mother of three children, suffered from menorrhagia for six years past. She has had frightful hemorrhages, but otherwise she has been healthy. In 1882, the first examination which he was permitted to make disclosed a large submucous, fibrous, uterine tumor, at the top of the fundus uteri, extending one inch above the umbilicus, its lateral diameter equalling its longitudinal diameter. A uterine sound was introduced eleven inches. There was no rectal nor vesical disturbance. The only inconveniences experienced were the hemorrhages and a "high stomach." The hemorrhages have repeatedly brought her to death's door, but her recuperative powers are astonishing. Dr. Etheridge then detailed her history for two years, during which time she had had several hemorrhages, which were controlled by sponge-tents, rest and ergot. He detailed also the treatment by a homeopathic physician, which had consisted of incisions into the cervix uteri, and the administration of sulphuric acid and fluid extract of hydrastis canadensis, the latter remedy being extolled as a sure cure for uterine fibroids. On November 12, 1884, Dr. Etheridge was called to see the patient, whom he found in a pitiable condition. She was exsanguinated, feverish and dyspeptic. She was placed on tonic treatment and rapidly convalesced. In October, 1885, she had another hemorrhage which lasted twenty-four hours, before a sponge-tent was introduced. This tent was speedily forced out. Three more sponges were subsequently introduced, and an enema of thirty ounces of fluid extract of ergot was given. Powerful uterine contractions ensued; the capsule of the tumor was ruptured, and the hemorrhage ceased. Three days after that one pound of the tumor was pulled and cut away. The tumor was pultaceous, friable, and accompanied by a disgusting odor. On the day following, one-half of a pound of the tumor was taken away, and two days later, as much more. Three days later the patient was put under the influence of ether, and Dr. Etheridge attempted to remove the remainder of the tumor but only succeding in removing two pounds more. After this operation,the patient went into collapse and nearly died. However, she recuperated so rapidly that in five days thereafter he removed another pound of the tumor. Five days later he succeeded in getting away another pound and the pedicle. The uterus, during the ten days past, had decreased rapidly in size, and the fetid vaginal discharge had lessened. During the three weeks in which the six pounds of gangrenous mass were removed, he expected the patient would develop sepsis, but none occurred. As the patient was continually under the influence of ergot, and shreds of the tumor came away between the times of the operation, it is safe to estimate the weight of the tumor at thirteen pounds. The points of interest in the case were that the hemorrhages recurred most severely in the autumn, which was probably due to the changes in the circulation incident to the ocrence of cold weather; and also that, in order to remove these tumors expeditiously, it is imperative that we should be enabled to draw the tumor down into the vagina, where it can be grasped, and, at the same time, to continuously contract the uterus behind the descending tumor so as to facilitate traction and to avoid hemorrhage.

The President remarked that this case teaches the lesson of the importance of early interference in fibrous tumors of the uterus, especially those that are large and accompanied by hemorrhages, which facts indicate that they are close to the mucous membrane, and under the effect of the contraction of the muscular fibres of the uterus, and thus susceptible to the influence of ergot.

Dr. Jacob Franks then detailed

A Case of Vesical Calculus,

in which lithotrity was attempted. A Bigelow lithotrite was introduced, which grasped a stone measuring two inches. Upon turning the screw the instrument broke, and in consequence of this accident a portion of the instrument was left in the bladder. On the next day the lateral operation of lithotomy was performed, and the calculus and the broken piece of the instrument removed. The patient made a good recovery.

The Society then adjourned.

SOUTHERN ILLINOIS MEDICAL ASSOCIATION.

REPORTED FOR THE REVIEW BY J. B. ROSSON, M. D., VERGENNES, ILLS.

The Thirteenth Semi-annual Session of the Southern Illinois Medical Association was called to order by the President, Dr. Beattie, at 1 o'clock, Thursday, November 19, 1885, at Coulterville, Ills.

Prayer was offered by Rev. P. Gibson.

An address of welcome on behalf of the physicians of Coulterville, was delivered by Dr. Leiper.

Dr. J. H. Rauch, Secretary of the State Board of Health then was introduced and addressed the society.

Dr. Booth, from the Committee on Surgery, reported a case of poisoning by the local application of iodoform and sulphuric ether.

Dr. Guthrie reported a case of hematuria.

Dr. John J. Higgs was elected to membership.

The Secretary read a letter from Prof. J. T. Binckley, M. D., of Evansville, Ill., regretting his inability to attend the meeting.

Dr. Rosson read a paper on the antipyretic effects of quinine and antipyrine in typhoid fever, and advocated the plan of keeping the temperature reduced in that disease. This paper was discussed by Drs. Dyer, Booth, Guthrie, Marshall, Leiper, Mathis and Wetmore.

Adjourned.

Night Session.

The society was called to order and an address of welcome was delivered by Mr. Russell of Coulterville on behalf of the citizens of the town, and a response was made by Dr. Guthrie, of Sparta, Ills.

Dr. Dyer read an interesting paper on the diseases of old age.

Dr. O. B. Ormsby then read a poem entitled, "The Doctor's Dream," which was well received by the audience.

Adjourned.

The society met Friday November 20, at 8 o'clock a. m.

Dr. Wetmore, from the Committee on Anatomy and Physiology read a paper on a medico-legal investigation in a case of murder.

Dr Rothstein from the Committee on Materia Medica read a paper on iodine inhalations in phthisis, fluid ext. jaborandi in pleuritis, cocoaine in producing anesthesia of mucous membrane and chloral hydrate in dysentery.

Dr. Guthrie from the Committee on Theory and Practice read a paper on the power of nature in disease as a curative agent.

Then followed a discussion on croup and diphtheria by Drs. Mathis, Coulter, Wetmore, Booth, Ormsby and Dyer.

Dr. Gault exhibited a case of caries of the internal malleolus, caused by an injury. The case was discussed by Drs. Booth and Mann.

Dr. Ormsby read a paper on puerperal fever, with a temperature of 106° F., which he controlled with antipyrine.

Dr. Mathis discussed a case of nocturnal epilepsy, which had been injured by the long administration of bromide of sodium.

Dr. Hallam made some remarks on the case reported by Dr. Ormsby.

Dr. Dyer introduced a resolution regarding the name of Malcolm Graham, but after some discussion the resolution was laid on the table.

Dr. Booth moved that the next meeting be held at Murphysboro. Carried.

Dr. Mann read a paper on occlusion of the vagina, upon which he successfully operated.

The paper was discussed by Dr. Booth.

Adjourned.

The Society met at 1 p. m.

The following committee of arrangements was announced by the President: Drs. O. B. Ormsby, J. B. Rosson, James Brewster and E. H. Wheeler.

Dr. Hallam read a paper on the diseases of children.

Drs. Miller and Mann made some remarks on croup and diphtheria.

Dr. Dyer moved a vote of thanks to the physicians and citizens of Coulterville. Carried.

Dr. Hallam introduced a resolution that the Committee on Hygiene be changed to the "Committee on Hygiene and State Medicine." Carried.

The President thanked the members for their attendance, and for the interest they had taken in the meeting.

Adjourned to meet at Murphysboro, Illinois, the third Thursday in June, 1886.

A. B. Beattie, M. D., President.
H. P. Huntsinger, M. D., Secretary.

CORRESPONDENCE.

NEW YORK LETTER.

New York, December 18, 1885.

Editor Review: At the last meeting of the New York Surgical Society a paper was read by Prof. Henry B. Sands on "Rupture of the Ligament Patellæ and its Treatment by Operation." Dr. Sands was unable to find records of but sixty-five cases which had hitherto been published. He presented to these a carefully-prepared table of thirteen cases of his own collation. The proportion of cases occurring in the New York Hospitals bore the ratio 1 case of rupture of the ligamentum patellæ to 25 cases of fracture of the patella itself. The ordinary plan of treatment was the same as that usually followed in transverse fracture of the patella and the functional result was usually good. Dr. Sands presented one case, a sailor, whose ligamentum patellæ had been ruptured while he was at sea, about a year

previously. He was of course obliged to forego treatment for a while. There had been in this case complete inability to extend the leg. Dr. Sands had operated on this patient, suturing together the ends of the severed tendons, and the result was perfect, the function being fully restored. He was of the opinion that under strict antisepsis, the knee joint could be opened with impunity.

Dr. Weir presented a man whom he had treated sixteen years previously by means of the plaster-of-Paris splint. The result in his case was perfect also.

At the same meeting Dr. Lewis A. Pilcher, of Brooklyn, presented a man twenty years of age on whom he had operated for stone in the bladder fourteen days previously. The method employed was the supra-pubic. Nine ounces of water were injected into the bladder and a rubber ball inflated in the rectum, thus throwing the bladder forward. The abdomen and bladder were then opened above the pubes and a stone weighing 270 grains was extracted. The bladder was sewed up with fine silk, the abdominal wound closed, and a soft urethral catheter passed into the bladder and allowed to remain there nine days. Healing had resulted by first intention without the appearance of any untoward symptoms. Dr. Pilcher was of the opinion that the supra-pubic was preferable to litholapaxy.

The paper recently presented by Dr. Joseph E. Winters before the Academy of Medicine on "Diphtheria and its Management," deserves a more extended notice than the casual reference contained in my last letter. He regards diphtheria and membranous croup as two distinct diseases. As regards the causative factors of each, cold "cannot give rise to a membranous exudate in the larynx, except with the presence of the diphtheritic poison." It (cold) may and does cause laryngeal and pharyngeal catarrhs and thus facilitates the spread of diphtheritic poison when once it has gained access to these localities. Catarrh therefore predisposes to diphtheritic laryngitis, and exposure induces catarrhal inflammation the more readily in a child depressed by diphtheria.

In regard to the treatment Dr. Winters held very positive opinions. He regarded the mercurials as worse than useless, so far as any specific antagonism to the disease poison was concerned. He considered their administration as even dangerous, adding to the already depressed condition. A small dose of calomel might be of service at the outset. The fact that stomatitis and salivation did not appear in many children treated with mercurials was not pertinent to the question under discussion. He referred to the recent demonstrations of Blythe and E. Klein that corrosive sublimate possesses no more power as a germicide than pure water. Where children with diphtheria were suffering with scrofulous enlargement of the lymphatic glands, a mercurial might be advantageously added to the treatment. In thus condemning the use of mercury he placed himself in opposition to the teaching of some of our lecturers on pediatrics, notably Prof. Jacobi. He regarded the great indication to be the elimination of the diphtheritic poison. Mild purgation by small doses of calomel would act on the bowels; hot poultices to the throat would start up its mucous secretions. Dover's powder would act as a sedative, diaphoretic and diuretic. His favorite remedy was the muriated tincture of iron, given in glycerine and with the addition of chlorate of potash. To obtain decided effects of the iron in a case of septic diphtheria we should give at least one dram of the tincture every hour to a child two to five years old.

A very interesting discussion followed which was very generally participated in. No others present had given iron in such large doses as were named by Dr. Winters. The local treatment by applications, sprays, etc., had strong advocacy.

Several cases of trichinosis from eating partly-cooked ham have recently occurred here. None resulted fatally.

The usual exercises at the College of Physicians and Surgeons were suspended on the day of the funeral of its munificient benefactor, Mr. W. H. Vanderbilt. J. E. N.

ITEMS.

—Nickel-Plated Corpses. — An ingenious Frenchman has conceived the thoroughly Parisian idea of preserving bodies by covering them with a metal skin. Burying, he says, has been condemned by experience, cremation is bad, as it destroys all evidence of crime in case murder has been committed, and embalming is expensive. But galvanizing is safe and cheap. The poor can be zinc-plated, well-to-do individuals may acquire a copper coat, and the millionares can enjoy the luxury of silver or gold-plate. M. Kergovaty, the inventor of this method, says he has already used it successfully eleven times in the case of human beings, and over a hundred times for animals.

—From all accounts a veritable pilgrimage of persons bitten by alleged mad dogs is setting in to Pasteur's laboratory in Paris. We learn that in the past year twenty-five persons died of hydrophobia in London. The average for the preceding ten years was six.

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